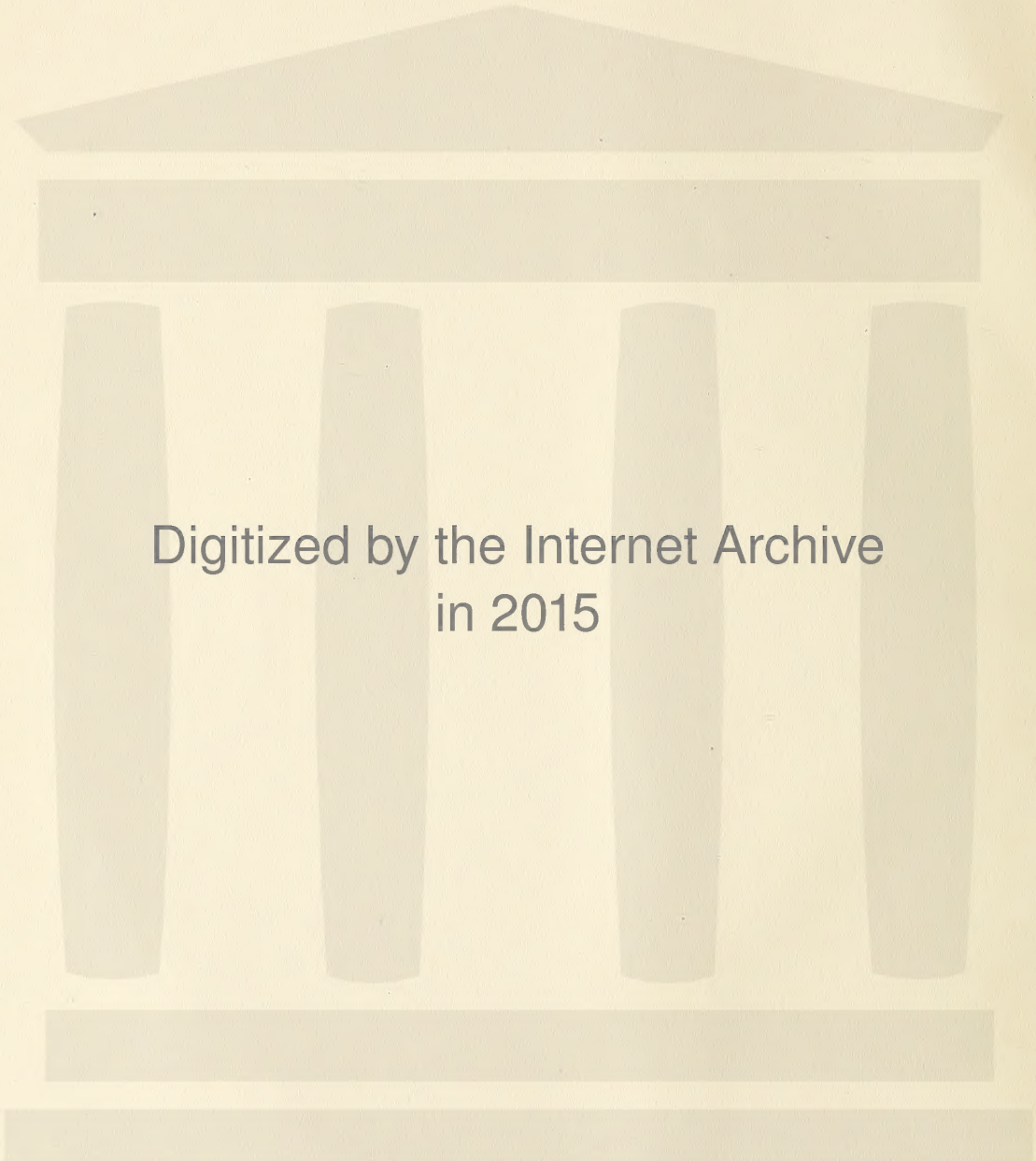
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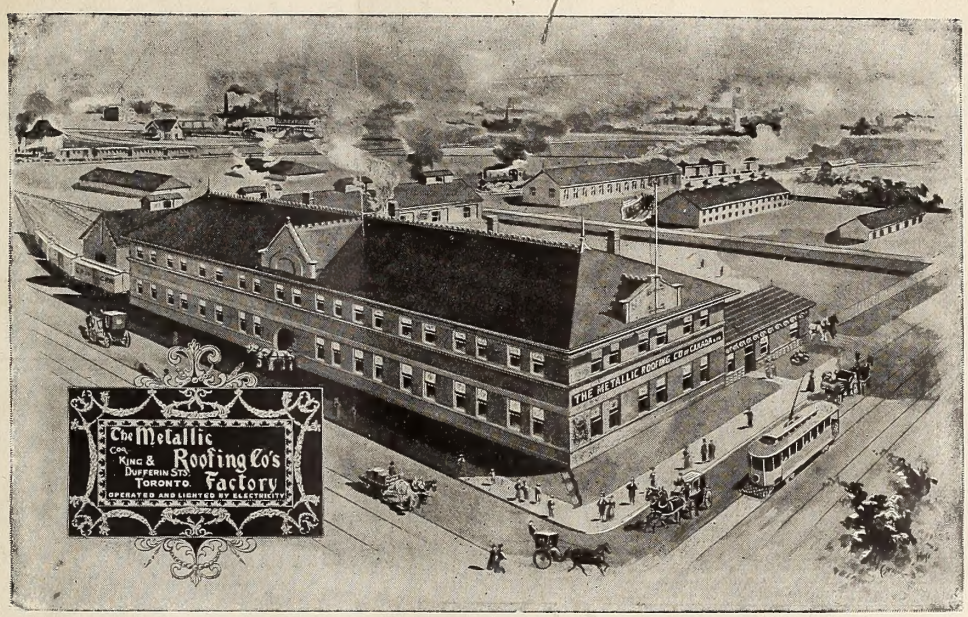
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Vol. VII. No. 1 AUGUST, 1906 — July 1907

INDUSTRIAL CANADA

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THE METALLIC ROOFING COMPANY OF CANADA, LIMITED
MANUFACTURERS OF
ARCHITECTURAL SHEET METAL BUILDING MATERIALS.

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BRANCH OFFICES, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, HALIFAX, QUEBEC.

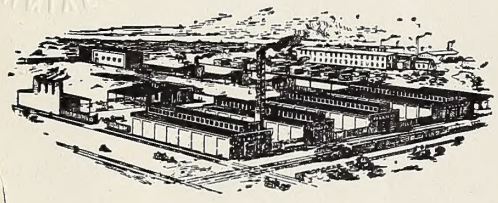
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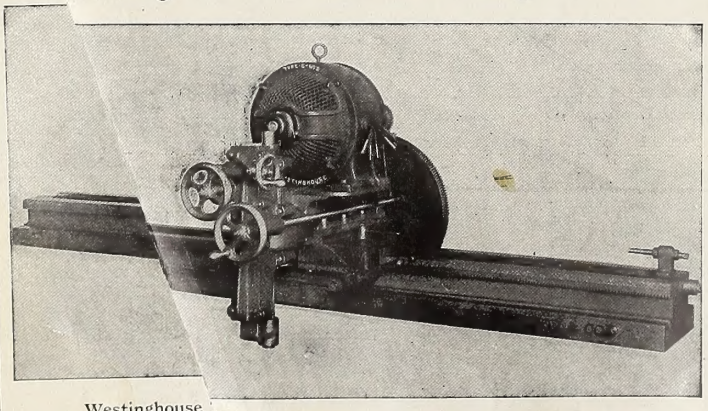
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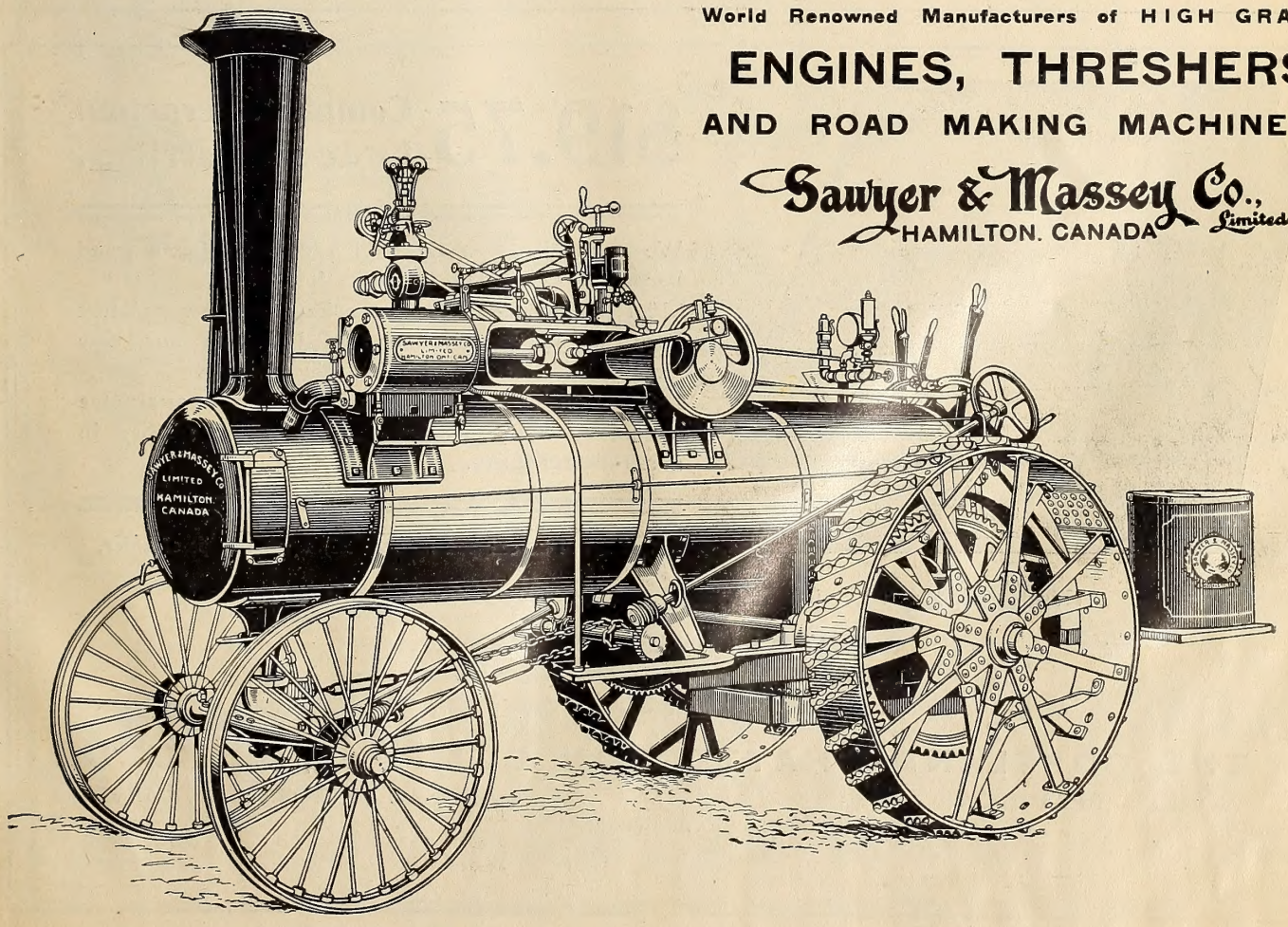
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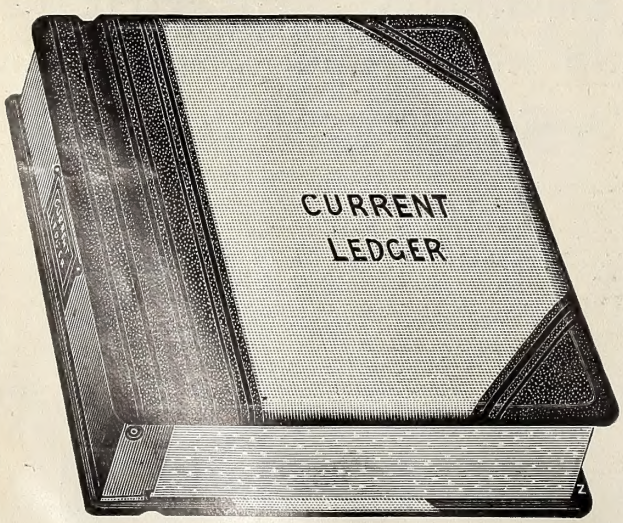
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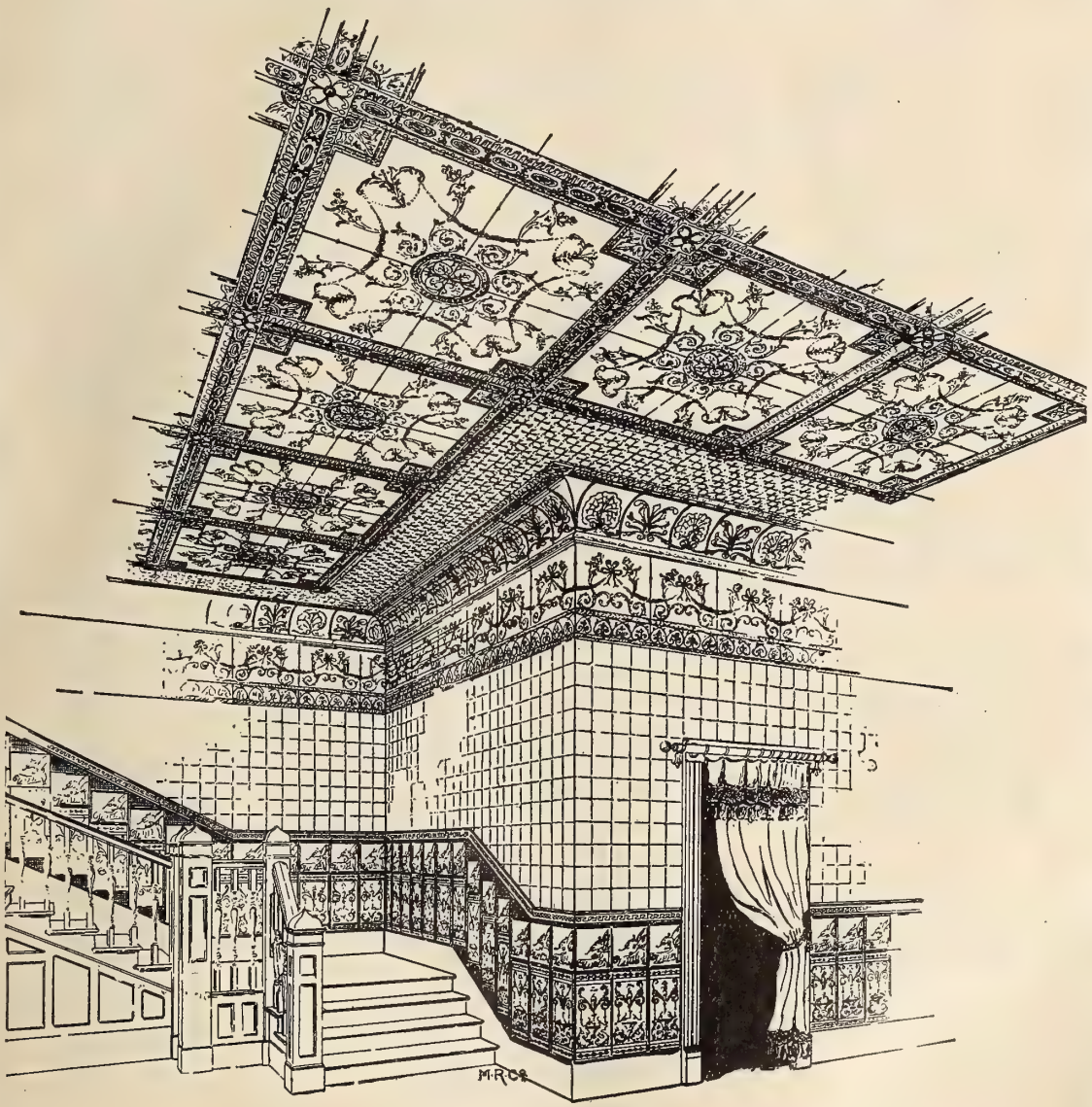
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Has mapped out a Big Programme for herself during the next few years. She may not achieve it all, but SHE IS CERTAIN OF BECOMING IMMEDIATELY A WEALTHY AND ATTRACTIVE CITY, GROWING IN POPULATION WITH THE DEVELOPMENT OF THE RICH COUNTRY AROUND.

In these words the staff correspondent of "THE GLOBE," Toronto, concluded a highly favorable letter on "The New Regina," which was published in that paper on June 19th, 1906.

Mackenzie and Mann have shown their appreciation of Regina's importance by purchasing the Qu'Appelle, Long Lake and Saskatchewan Railway, of which the city is the southern terminus. They will now push on to the capital their extension from Winnipeg, which has already passed Brandon. The Canadian Northern Railway is determined to secure a larger share of the trade of Saskatchewan, which radiates from Regina. THERE IS A REASON



FULL information with reference to Factory Sites, Trackage Facilities, and Municipal Assistance will be given by

The Regina Board of Trade

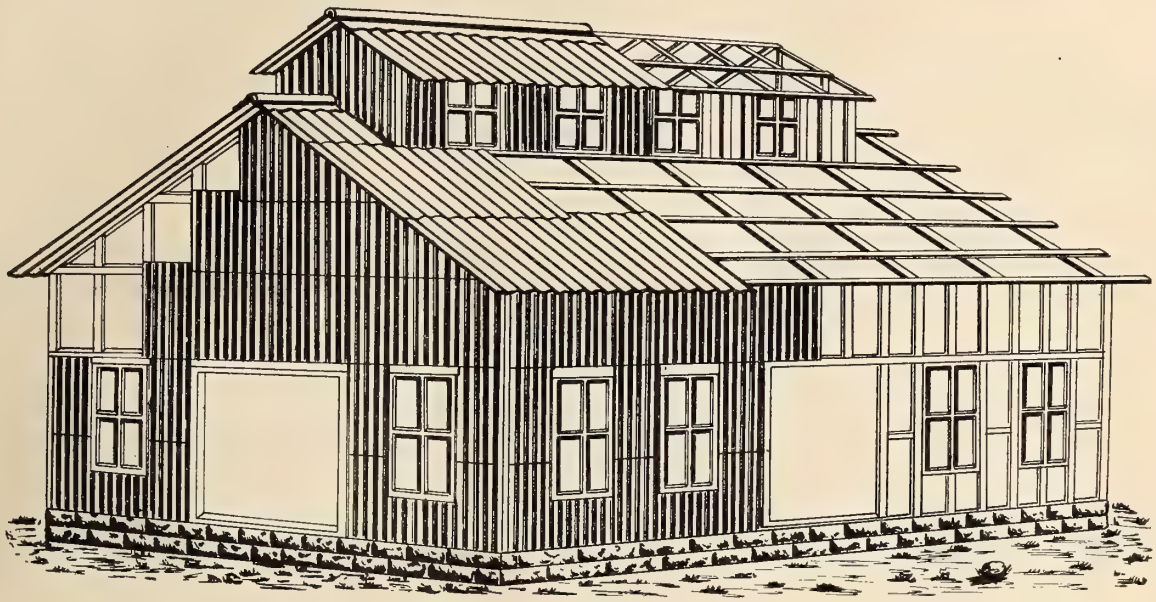
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Made in 1 in., 2 in., or 2¾ in. Corrugation in sheets any length up to 10 feet, in 28—26—24—22—20—18 gauge, both painted or galvanized. This class of material is most suitable for fireproofing **BARNS, FACTORY, MILL,** and **WAREHOUSE BUILDINGS,** and is water and wind proof. Corrugated Ridges, Lead Washers, and Galvanized Nails carried in Stock.

Send Specification to your nearest office for Catalogues and Prices.

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As soon as we rebuild our works will be glad to take up the question of having a new inventory prepared by your Company.

In the meantime, we are,

Yours truly,

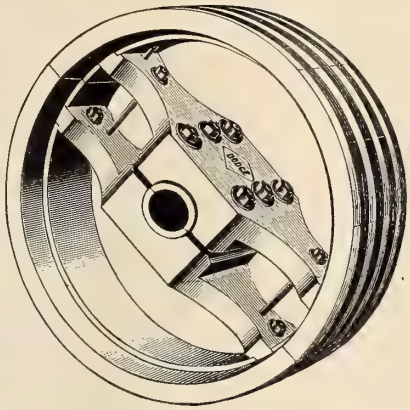
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DODGE Standard Wood Split Pulleys

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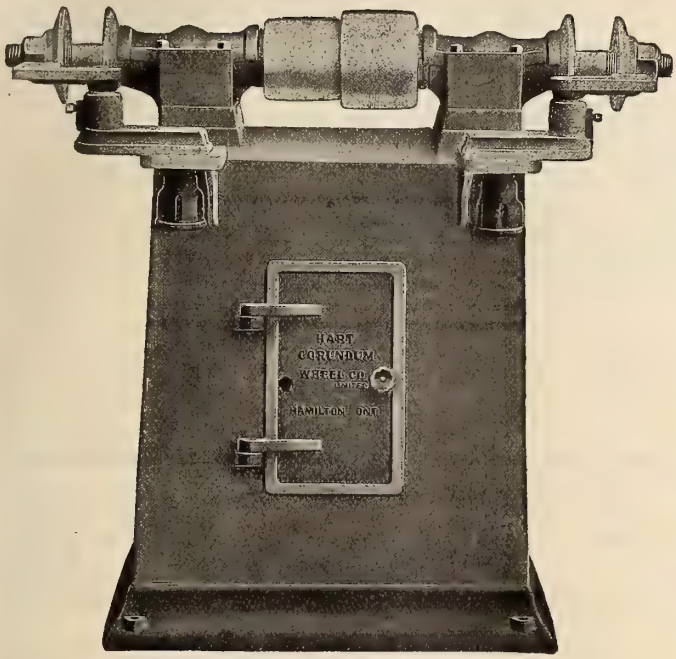
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Diameter of arbor between collars	1½ "
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Size of cone pulley on arbor	5 and 6 x 4½ "
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Height from floor to centre of arbor	35 "
Size of base	23 x 27 "

Countershaft has cone pulleys 15 x 16 x 4½ inches face.

Tight and loose pulley, 8 in. diameter, 5 in. face, and should run about 650 revs. per minute.

Our Pure Crystal Corundum Saw Gummers have no equal for their Rapid, Cool, Cutting Properties.

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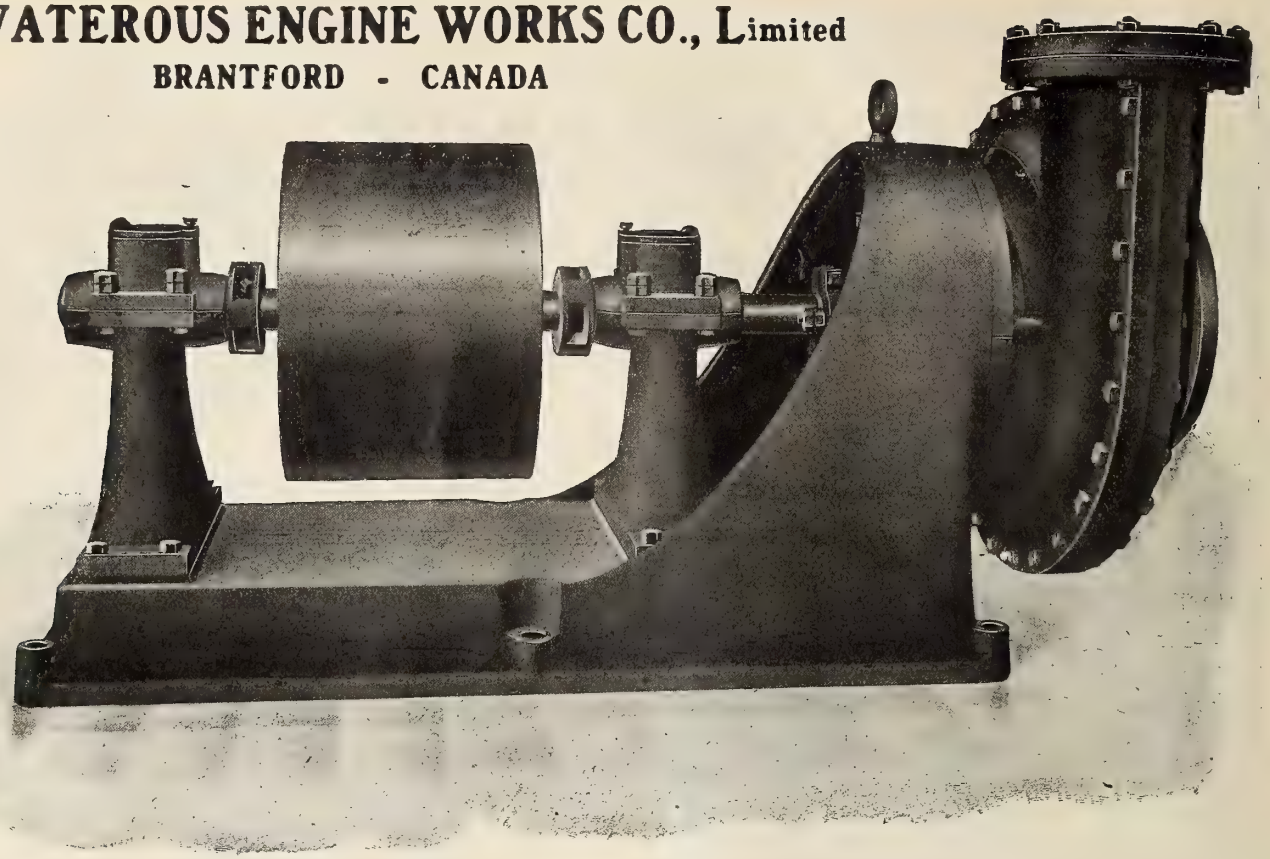
"Often a distinction is made between emery and corundum, many persons not recognizing emery as a variety of corundum. Emery is a mechanical admixture of corundum and magnetite or hematite. It is, of course, the presence of corundum in the emery that gives to it its abrasive qualities and makes it of commercial value, and the abrasive efficiency of emeries varies according to the percentage of corundum they contain."

Emery is imported, mined by Greeks and Turks, and contains only about 25 per cent. corundum. Our Crystal Corundum is guaranteed to be 98 per cent. pure alumina, a Canadian product, mined and manufactured by Canadians for Canadians.

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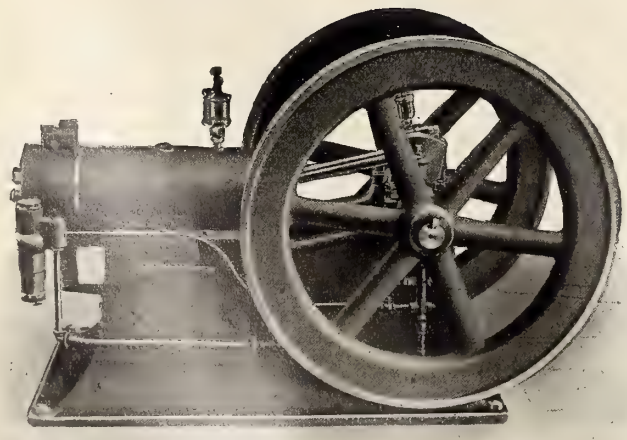
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Centrifugal Pump

WRITE US FOR PARTICULARS AND PRICES.

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The only Gas and Gasoline Engine that runs either way.

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REAL ECONOMY IN FURS

A GREAT MISTAKE is made by many a good sharp fellow in supposing that the two essentials in buying furs are a good appearance and a low price. Now although the appearance of a fur piece or a fur garment plays a star part in the selling, and the low price at which you may have bought means more money in your pocket, still there are several important points to consider before jumping at a conclusion. These are six in number, and may be briefly summed up as follows :—

First—The skin must be taken from the animal at the proper time, when the fur is thickest.

Second—An animal that is trapped doesn't yield a skin full of shot holes.

Third—The raw skins must be properly cured, evenly stretched and carefully cut.

Fourth—They must be dyed properly to retain their color and gloss.

Fifth—The seams must be wide enough to hold without tearing.

Sixth—Experts who thoroughly understand these various processes are not willing to work for nothing.

Now it's all very well to say "it doesn't cut any ice" so long as you make a good profit—how about your re-orders? Do they "cut any ice"? Does the lady who buys a fur jacket this year expect to find it go to pieces before the winter is over? Does the man who buys a fur cap or a pair of gauntlets go somewhere else when he wants a fur-lined coat? Not if you can help it!

Well, if you really intend to stay in business—intend to expand—enlarge—build up your business—it pays to buy furs that you can depend upon—furs that are guaranteed to satisfy—furs made up by experts, from the raw skins to the finished article, in the largest fur factory in Canada—the only factory in the country where every operation is performed under the one roof. It doesn't pay to deal with a house that isn't big enough to give you every possible advantage.

And Paquet Furs are not high priced either—they give you a handsome profit on every sale and ensure a host of satisfied patrons and a shower of re-orders.

One of our 18 travellers will show you our line if you say so. Write a postal to-day.

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Industrial Canada.

ISSUED BY

The Canadian Manufacturers' Association,

Incorporated.

"There be three things which make a nation great and prosperous: A fertile soil, busy workshops, and easy conveyance for man and goods from place to place."—Bacon.

Vol. VII. TORONTO, AUGUST, 1906. No. 1.

INDUSTRIAL CANADA

Issued monthly as the the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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Business Manager: G. M. Murray.
Editor: F. P. Megan.
Advertising Manager: B. L. Anderson.

A LARGE ATTENDANCE.

EACH year the Annual Convention of the Canadian Manufacturers' Association grows in importance. This year the special train to cross the continent will bear a more representative body of Canadian manufacturers than has ever been gathered together before. Already all the original accommodation has been applied for and the number to take the trip will be limited only by the limitations of the train. This assemblage will consist of captains of industry from every industrial centre in the country. Their deliberations should be conducive of much benefit to Canada.

Many things go to make up the attractiveness of the Convention and excursion. The opportunity of meeting men in all branches of manufacturing, whose points of view are influenced by many considerations, is largely beneficial. There will be no dull minutes on the way to Winnipeg, when the big train is filled with representatives all bent on the one thing, the success of the convention. That the convention will be successful is assured from the list of members who have already reserved accommodation. A good, representative and well-attended meeting is certain.

The excursion west of Winnipeg will be most attractive. There can be no monotony when the route runs through vast fields alive with harvesting activities, while stops are made at many of the most interesting towns and cities. To this is added a picturesque trip through the Rockies and on to the Coast. The beauty of this trip exceeds all description. Returning a new territory is revealed on the line of the C. N. R. The whole time taken is twenty-one days.

THE SCARCITY OF LABOR.

THE fallacy of discouraging or putting restrictions upon immigration into Canada of skilled workmen is making itself felt at the present time in the great scarcity of labor, which is everywhere in evidence. In all trades there comes the same story, restricted output on account of the inability of manufacturers to get men. The expansion of business at home and abroad has caused manufacturers to increase their plants, and with this has gone a general demand for more workmen.

How serious is the shortage of mechanics is shown by a bulletin just issued by the Canadian Manufacturers' Association. The report summarizes the results of a letter sent out to members of the Association asking for information as to the supply of labor. Three hundred and fifteen replies in all were received, of which 205 showed a shortage of help amounting to 6,273. These were distributed over the whole field of industry. When to this is added the great and growing need for men in railway construction, in farming, and in mining, the total number which could be absorbed runs into big figures.

The Government is going to great expense and trouble to induce settlers to come to this country. Tillers of the soil, wherever they are found, are urged by bounties and free land to come to Canada. Even those of the most doubtful quality are brought over in order that our fertile fields may be tilled. The one essential qualification seems to be an ignorance of mechanical skill. So soon as skilled workmen are given the faintest encouragement the hornets of the labor unions begin to buzz. Yet the proper manning of our factories is as important as the bringing under cultivation of new lands. The work of the mechanic makes him self-supporting from the first, he and his family are consumers of additional Canadian produce, and he is an element of importance in the general development of the country.

Selfishness alone is behind all efforts to render the importation of workmen difficult. The whole question

resolves itself into an attempt on the part of the unions to form a close corporation among the different trades, so that by causing a shortage of labor they may exact higher wages and more favorable treatment from employers. No high principle is at stake in the minds of these men. Neither fairness to employers nor a desire for the prosperity of the country at large figure in their calculations. It is just a sordid scheme to get more money for themselves for less work by limiting the labor market.

Nor do their efforts cease at discouraging the immigration of artisans. By fighting the system of apprenticeship they prevent the education of young workers. Instead of growth in the number of workmen to meet the increasing demands for labor there is stagnation. The situation towards which we are drifting demands attention, not only by the Government and employers of labor, but also by laborers themselves. Permanent injury cannot be done to the industries of the country without the workmen feeling the effects. Their prosperity depends upon the prosperity of manufacturers. If the shops of Canada are not permitted, through unfair exactions of workmen, to develop to their full capacity, no one will be injured sooner than the employees. The present situation calls for immediate relief.

SHIFTING RESPONSIBILITY IN FREIGHT CLAIMS.

AN important measure, known as the Hepburn Bill, has recently been passed by the Congress and Senate of the United States. Among the many provisions of the bill, aimed to correct the evils which have grown up in the business of transportation, is one which will be greatly appreciated by those manufacturers and shippers who have had to deal with claims for loss or damage to shipments of goods which necessarily have to travel over more than one railway line to reach destination. It is the practice of railways in Canada and the United States to make contracts and quote rates for through shipments to points on connecting railway lines. In the bills of lading covering such shipments special conditions are inserted, which have been framed in the interests of the railways to relieve them from responsibilities which, under the common law, they are required to assume in conducting the business of common carriers. Among these conditions is one generally to be found, which provides that the railway issuing the bill of lading does not contract for the safety or delivery of the goods beyond its own line. In handing the goods to the next connecting carrier the railway claims to act only as agent of the owner of the goods, and so soon as handed to the next carrier, or when such carrier has been notified that the goods are ready to be handed over, all responsibility for their safe delivery is disclaimed.

In Canada without such a condition the contracting carrier would be responsible for the safety of the goods entrusted to him from the point of shipment to the destination stated in the bill of lading. The law, however, permits special contracts with shippers, including conditions such as indicated, by which the carrier's responsibility is considerably curtailed. This is open to serious objection, because a shipper has no alternative but to submit to the special conditions printed in all bill of lading forms, framed by the railways for their own benefit. He must use the railways to reach his customers and they will carry only under special contracts.

The consequence is that when goods are shipped to points which can only be reached by passing over more than one line of railway, and are lost or damaged, it is always a work of difficulty, and frequently impossible, for the owner to recover. The shipping and delivering railways both disclaim responsibility for the loss, and the shipper is unable to determine where the responsibility rests. As the individual claims are usually not sufficient in amount to induce the shipper to undertake a fight against two or perhaps three railways in the courts the claims are dropped.

By the Act recently passed in the United States the railway lines are compelled to issue through bills of lading for property to be transported from a point in one state to a point in another, and the carrier issuing the bill of lading is held liable to the owner for any loss or damage to the property caused by the initial or any connecting carrier on the route. No contract, condition, receipt, rule or regulation of any kind, will be permitted to exempt the railway from this liability.

This provision squarely hits at an abuse in the payment of freight claims, which is within the experience of all manufacturers. It is said railways frequently pay claims for losses for which they are not really responsible on what are called policy grounds, to hold the good-will of shippers, but this is done only for shippers whose business is of large proportions. The small shippers are generally left to the tender mercies of the railway companies' claim agents, who invariably try to shift the responsibility to some other carrier or to protect themselves behind some unnoticed clause in the bill of lading.

In the Canadian Railway Act, while there is no specific provision such as indicated above, there is a section which requires the conditions of bills of lading and other contract forms to be approved by the Railway Commission. It is assumed that this body will not approve conditions which are not absolutely just and reasonable, and where the carriers are receiving their full lawful tolls it is only reasonable to expect that they will be obliged to assume those responsibilities which, under the common law, attach to their business, without the many restrictions which have been allowed to creep into the contracts for carriage.

INDUSTRIAL ALCOHOL.

GENERAL interest is being shown throughout Canada in the subject of tax-free alcohol for industrial purposes. It is a matter of immense importance to this country. Not only would the manufacture of alcohol be a paying industry if a suitable outlet in an industrial way were found for the product, but it would help greatly in the economic development of many other industries. The increased demand for grain would be of material advantage to the farmers. Many agricultural products lend themselves to the manufacture of alcohol, and spoiled grain, otherwise worthless, could be utilized.

This, however, is but a side issue. The important point to be considered is that cheaper heat, power, and light could be procured and a necessary element in a number of manufacturing processes could be laid down for a fraction of what it now costs.

The problem has got beyond the stage of whether we shall have cheaper methods or not in certain manufacturers. So long as similar restrictions to those imposed in this country were enforced in competing countries there was a hardship, but not one to actually cripple any industry. However, other countries have now removed the barriers to the free use of alcohol in manufacturing and henceforth our goods will be in competition with those made under decidedly more advantageous conditions.

Some European nations have been providing for the use of cheap alcohol for years past. Methods of denaturing have been perfected whereby there is no possibility of the product being used for human consumption. In Great Britain during one year nearly 2,000,000 gallons were used for industrial purposes. In Germany during the year 1903 there was the enormous consumption of 49,000,000 gallons. The figures show the extent to which alcohol would enter into the industrial field if it were to be had at a low cost.

Of more direct interest to Canada was the passing of a bill by the United States Senate at its recent session, providing for the sale of denatured alcohol, without the payment of an excise tax. This brings the matter home to our own doors. On August 28th this law will take effect. A great impetus will then be given to those manufactures into which alcohol enters to an important extent. In the July issue of INDUSTRIAL CANADA Professor Cohoe enumerated over thirty such lines. These include the important branches where it is used as a solvent, as in varnishes, lacquers, etc., soap-making, and many others. To these may be added such articles as ether, vinegar and the fulminates (of which alcohol is the raw material). Finally there are its uses in light, heat and power.

The value of alcohol for the generation of power has not been appreciated heretofore in this country. The cheapness of gasoline and the prohibitive price of alcohol have retarded the manufacture of special engines, using the latter as a fuel. But the growing use of gasoline has forced the price up and now, were it not for the restrictions of the inland revenue tax, alcohol could be sold for less than gasoline. Moreover the supply of gasoline is to some extent limited. There is no limit to the amount of alcohol which can be produced.

Now that alcohol has been put on a fair commercial basis in the United States there will be rapid progress in the development of engines specially applicable to it. It is claimed that a gallon of alcohol will produce 10 per cent. more power than a gallon of gasoline. In such advantages it is important that Canada should have a share. The Canadian Government have been approached on the subject and urged to provide for the sale of denatured alcohol free of excise tax. The next session of Parliament should see such a measure enacted.

THE CONGRESS OF CHAMBERS OF COMMERCE.

PREFERENCE within the Empire was the great principle adopted by the Congress of the Chambers of Commerce of the Empire at its recent meeting. The resolution on the subject was moved by Mr. Geo. E. Drummond, of Montreal, Chairman of the Canadian Manufacturers' Association delegation, and seconded by Mr. W. F. Cockshutt, M.P., of Brantford. It is significant of Canadian feeling that each of the six Canadian bodies represented at the Congress presented a separate resolution setting forth the advantage to the Empire of an Imperial preference. At the meeting these were combined into one resolution which had the enthusiastic support of the whole Canadian delegation.

It was not to be expected that such a resolution would receive unqualified support from all parts of the Empire. India opposed it and it is easily understood that if India raised a tariff against any country she would act against the best interest of herself in her present state of development. Eighteen representatives of English Chambers also opposed it, while the Australian delegates without committing themselves on the question of the benefits of such a measure if it could be worked out, voted against it on the grounds that to them it seemed impracticable.

But the great majority of the delegates supported it enthusiastically. The number of English representatives, particularly, who voted for it this year was far above those who supported a similar resolution at the last meeting, in Montreal. This change of feeling is remarkable, coming as it does during a time of general prosperity. It would appear that the leaven has been working among those who are most deeply interested in the fiscal question. By the adoption of the Imperial Preference resolution the cause of inter-imperial trade is given a strong impetus.

Other questions of importance to Canada were discussed. Cheaper postage on newspapers from Great Britain to Canada was strongly advocated, and met with general favor. The Postmaster-General subsequently stated that, although there were manifest difficulties in the way, the question was occupying his earnest attention. This matter of postage is particularly pressing in the case of Canada on account of the mass of cheap magazines, many of them printed chiefly for the sake of the advertisements appearing in them, which are circulated here from the United States.

While the Congress was successful in its work on the whole, some changes are required in the programme for future meetings. The preference discussion took up a day and a half, and the Imperial Council and Defence of the Empire motions occupied the rest of the second day. Thus, only one day was allowed for the many other resolutions which were submitted. This was, to say the least, unfortunate. Decisions of this great commercial Parliament should be reached only after mature consideration. Of the motions introduced some were scarcely within the province of this body. Others, however, were of real importance and deserved more than the few minutes' attention which was given to them. Another year closer supervision of resolutions should be made, in order to eliminate such as come not properly within the scope of this body's deliberations. The time of meeting might well be extended, too. The growing complexity of imperial relations makes the solution of them yearly more difficult. The work of a large representative body should not be stunted by an effort to save a few hours' time.

JAPAN ADMITS CANADIAN GOODS AT MINIMUM TARIFF.

CANADA has been admitted to the benefit of the Japanese most-favored nation treatment, which was accorded to Great Britain by the treaty of 1899. In the original treaty a clause was inserted providing for the admission of any British colony to equal treatment with Great Britain, providing such colony admitted Japanese imports at the minimum tariff. The Canadian Government did not accept the terms of the treaty at the time it went into effect and Canadian manufacturers have suffered as a consequence ever since.

The ratification of the treaty in its application to Canada is the result of an agitation started by the Canadian Manufacturers' Association three years ago. In 1903 INDUSTRIAL CANADA discussed the subject in its columns. At that time a letter was published from an exporter, who stated that it was impossible to sell Canadian cottons in Japan, not only on account of the additional 5 per cent.

duty which had to be paid, but because of a prejudice against this country consequent upon its refusal to become a party to the British treaty. The Canadian Manufacturers' Association took the matter up with the Government at Ottawa, and presented the case of the manufacturing interests of Canada. The seeds sown then have now borne fruit in the admission of Canada to the benefits of the minimum Japanese tariff.

How much Canada will be benefited by the most-favored nation clause will be readily understood by reference to the sub-joined list of articles to which it applies. Only the more important items are given.

	Former tariff against Canada per cent.	Most-favored nation rate, to which Canada is not entitled per cent.
Milk (condensed)	15	5
Hats, caps and bonnets	30	10
Leather	15	10
Bar and rod (metals) exceeding ¼-inch. diameter	Specific 133 lbs. 35.6 cts.	133 lbs. 26.1 cts.
Rails	10	5
Sheet and plate, corrugated	10	7½
Steel bar, rod, plate and sheets	10	7½
Wax, paraffin	10	5
Paper, printing	15	10
Paper (all other except Chinese and hanging)	15	10
Sugar	20	10
Cotton (damasks, drills, ducks, prints, satins, velvets, velveteens, ginghams, shirtings, etc.)	15	10
Alpaca, balzarine, buntings	15	10
Flannel	15	10
Woollen cloths (all kinds)	15	10
Flax, yarn for weaving	10	8
Canvas	10	8
Linen (grey, white, dyed or printed)	15	10
Blankets	15	10
Yarns, all sorts other than cotton, linen, hemp, jute and woollen or worsted	15	10
Caoutchouc and gutta percha, manufactures of	20	10

The benefit is very substantial. In most cases it is 33 1-3 per cent. and runs up to double this on some articles. With the minimum tariff against Canadian manufacturers and the shortest route for shipment across the Pacific, Canada's trade should grow to large proportions. In April of this year our exports to Japan amounted to $106,129. The great expansion of Japan industrially is increasing her buying powers enormously. Her people are rapidly adopting Western habits of life and as their ideas change they will buy more and more of our manufactured products.

Manufacturers will note that to take advantage of the lower rate it is necessary to fill out a special form, a copy of which will be supplied by the Imperial Consulate General of Japan at Ottawa. For the benefit of exporters a copy of this is shown on another page of INDUSTRIAL CANADA.

EDITORIAL NOTES.

Next session of the Dominion Parliament should be an important one—tariff legislation, commission on industrial education and free harbours are but the beginning.

Our census volumes are coming out very slowly. It is now five years since the industrial census was taken and to date the census of occupations has not yet appeared.

It will be a fortunate day for Canada at large and British Columbia in particular—not to overlook the capitalists—when an all Canadian line runs north and south from Vancouver to the Yukon. The field for prompt returns in minerals, timber and fish is most promising.

In the improvement of our civil service we are lagging behind even the United States, at whom we are guilty at times of pointing the finger and thinking we are not as those Republicans in the spoils system; and "The Canadian Magazine" is embarking on a good work in awaking wider interest in our civil service.

We trust the Railway Commission's visit to the Yukon will help clear up Yukon railway rates difficulties. The White Pass and Yukon Railway is owned in England, officered by Americans, runs through both United States and Canadian territory, and lives on Canadian trade. Its dividends to date are said to have repaid the entire original investment.

Shippers from Windsor and intermediate points to Toronto or Montreal pay more freight proportionately than do shippers from Chicago or Detroit. The Railway Commission ordered the railway companies to remove this discrimination. Instead of reducing the rates in Ontario the railway people are negotiating with the United States companies to increase their rates. This is not the solution intended by the Commission. The rates for the short hauls must be reduced.

A special Canadian section has just been organized by the British Chamber of Commerce of Paris, France, for the purpose of developing trade between the two countries. Already our trade with France forms a valuable part of our commerce. For the past twelve months we did more business with her than with any other country except Great Britain and the United States. There are several lines of articles manufactured here which might be sold to advantage there. Lack of knowledge of the requirements of the market has always been more or less of a bar to a more extensive trade development.

The present action of the British Chamber does much to remove this difficulty. The Chamber was organized in 1872, and since that time has proved of great benefit to those engaged in trade between France and Great Britain. Its high position in the commercial world has long been recognized. It is a satisfaction then to Canadian manufacturers to have this body ready and anxious to assist them in the French field. Manufacturers should take advantage of the assistance so kindly offered and investigate, with the aid of the Canadian section, the possibilities for further trade with France.

EAST AND WEST BOUND RATES

Arbitrary Discrimination Against Manufacturers Shipping East.

THERE is wide-spread dissatisfaction amongst the manufacturers of Ontario because of the unjust and arbitrary arrangement of railway freight rates between points in Ontario, Quebec, and the Maritime Provinces. With few exceptions higher rates are uniformly exacted for eastward than for westward shipment between the same points. Notwithstanding repeated attempts by those interested, individually and collectively, to induce the railways to arrange an amicable readjustment, there seems to be no disposition to meet the situation unless some compelling force is brought into play.

Changed Conditions.

It may be that the scheme of rate-making adopted by the railways was suited to conditions which existed when it was arranged many years ago, but these conditions have greatly changed, and the rates do not appear to be fairly adapted to the trade necessities of to-day. In the early days there was very little manufacturing in western Ontario except by local mills and factories, which did not attempt a large shipping business. The manufactured merchandise was usually imported and distributed largely from the east to the west. There were no large distributing centres in the west. The traffic which originated in the west consisted generally of live stock, grain, products of the farm and cereals, all of which were carried to the east as elsewhere on a special basis of rates. As there was practically no other merchandise to move from Ontario to the east there was naturally little or no concern about freight rates thereon. All this has been gradually changed until to-day there are immense industrial establishments throughout Ontario whose products are distributed from one end of the Dominion to the other. The adherence to the old system of freight rates by our railways in the face of this marked change in the industrial conditions is difficult to understand.

Direction of Traffic.

It seems to be generally admitted that the heaviest movement of traffic is in the easterly direction. Unfortunately there is a total lack of accurate information on the point. The railways alone can furnish figures as to the amount of traffic handled, and they have not so far shown any inclination to enlighten the public in this regard. It is an accepted theory of railway traffic managers that volume of traffic has an important and direct bearing upon the freight tolls. Where a large tonnage is available it can be handled at a much lower cost than where traffic is light. So that if a difference in rates were to be made, it would be natural to look for the lower figures for eastbound movement.

Water Competition.

In support of the present unequal adjustment of rates the main arguments advanced have been water competition and the empty car haulage in the west-bound direction. In a recent discussion before the Railway Commission it was alleged that water competition is keener on west-bound than on east-bound traffic. There is an element of truth in this when all traffic to the head of navigation is considered, because some of the steamers on their west-bound trips carry merchandise from all river and lake ports en route, while going east they are fully laden with grain and its products from the head of the lakes for the seaboard, and consequently do not stop at intermediate ports. In the local trade, however, there is a sufficient number of merchandise ships plying between river and lake ports to maintain a healthy competition both ways were it not for certain agreements entered into by the lake carriers and the railways which effectively regulate or altogether stifle the force of competition. The steamers are prohibited from offering any rates to attract traffic from interior points to the water front. They are required to base all their charges upon those of the competitive railway lines; certain figures are deducted from the railway freight rates in order to ascertain the steamer charges. This is wrong both in principle and practice. The steamboat rates should be based upon a reasonable return for the service rendered regardless of what the railways are charging. A significant point about the so-called "differential" rates, which the steamers are allowed to deduct from the railway rates, is the fact that the "differentials" are greater on east-bound than on west-bound traffic; a seeming contradiction of the claim that water competition is keener west-bound.

Empty Car Movement.

It should be remembered that only a comparatively small number of the cities and towns in Ontario enjoy the benefit of water communication, and some further reason is, therefore, necessary to explain the unequal freight rates complained of.

The other argument put forward is the empty movement of cars westward to Ontario to carry the heavy traffic east. It is said low rates are given from eastern points in order to develop a traffic to fill these empty cars. Here again we are without information as to the number of cars hauled west without loads, because the railways have not seen fit to give out the figures. It is doubtless a fact that certain cars, which are required for the transportation of traffic from the west to the east have to return empty for re-loading. Live stock and coal cars are in this class, but these are not adapted for the carrying of other merchandise. At certain periods of the year, as for instance during the heavy movement of grain after harvest, there would necessarily be a movement of empty cars to the West in order to take care of the enormous tonnage waiting shipment to the East, but is this a justifying reason for excessive rates on merchandise moving in the easterly direction? The theory upon which lower rates are given in order to induce the movement of freight and furnish loads for cars which would otherwise be hauled empty, can have no bearing upon the ordinary rates for distribution of merchandise. This traffic would move in any event. It is perfectly clear that it would be possible in special cases to develop a tonnage for empty cars without involving undue discrimination. This was done by some United States railways in the development of the Vermont marble quarries; there, through the establishment of low rates, a traffic was found for cars moving to western United States points. Mr. J. J. Hill also takes credit for having developed the Pacific Coast lumber industry by granting low rates to the east in order to find a traffic for cars which must otherwise return east empty. This was accomplished without involving any question of discrimination in rates upon general merchandise. It would also be not unreasonable to make rates upon ore from mines to furnaces, or for similar movements, if a permanent and large tonnage could be built up to furnish loads to prevent empty car haulage. But when applied to all classes of general merchandise there

does not appear to be sufficient weight in this argument to justify the discrimination which at present exists between Ontario and the East. These differences in freight rates, no doubt, inflict a direct hardship upon those who are obliged to pay the higher rates; while at the same time even from the railway view point the differences do not appear to be sufficiently large when applied to freight carried under the class tariffs to have any effect upon the volume of traffic to be handled, much less furnish loads for returning "empty" cars.

Maximum Rates Too High.

A difficulty in the way of adjustment seems to be the habit of our railway managers of looking at the maximum freight tariffs, which have been filed with the Railway Commission, as the test of reasonable rates. These maximum freight tolls are practically the same as adopted in some of the early railway charters, and have been in force in Ontario for the past twenty years or more. Since they were originally adopted traffic on our railways has increased tenfold. While the railways adhere to these old rates in the maximum tariffs, the necessities of trade have compelled them to adopt lower rates in tariffs which cover the distribution of merchandise from many centres, and they have also in use countless numbers of special rates on particular classes of traffic in what are termed commodity tariffs, but the unequal application of these rates gives rise to frequent complaint of discrimination and undue disadvantage. The very fact that the railways have had to depart from their standard rates in this way is prima facie evidence that they are altogether unsuited to present day conditions. It is high time that our railway managers realized that the conditions of to-day are not those of twenty years ago, and set about revising their tariffs in order to bring them in harmony with present day requirements.

Opinion of Railway Commission.

The Railway Commission, in a recent decision dealing with rates on a particular traffic from Ontario points, states that it considers the charging of higher tolls in the eastward than in the westward direction constitutes an unjust discrimination, and declares that the tolls should be equalized. The Commission also expresses the opinion that the elements of water competition and the movement of empty cars west-bound, strongly urged by the railways, do not affect the question.

These remarks seem to have a wider application than indicated in the text of the memorandum. The differences in freight rates exist between all inland points where water competition is entirely absent. A shipment from Mount Forest to Sherbrooke, for instance, is required to pay higher tolls, ranging from $1.20 per ton downward according to the class of traffic, than assessed in the opposite direction. Shipments from Carleton Place to London are similarly carried for less than if the movement was reversed, and the same discrimination exists between Moncton and Strathroy, or any other two interior points between Windsor in the west, and Sydney in the east. The differences are also found to exist between points situated on branch lines where the west-bound movement of empty cars can hardly be counted as a factor in rate making.

This question has been the subject of more or less discussion by the Railway Committee at the last two sessions of Parliament, and it may be that recent investigations will cause our railways to set about a readjustment of the unsatisfactory rate conditions. Unless they do so the public must look to the Railway Commission to put a stop to the discrimination.

EXHIBITORS IN NEW ZEALAND.

The following Canadian manufacturers are sending exhibits to the New Zealand International Exhibition:

Canada Cycle and Motor Co., Toronto; Dodge Manufacturing Co., of Toronto, Ltd., Toronto; Taylor, Scott & Co., Toronto; the Office Specialty Mfg. Co., Toronto; the R. S. Williams & Sons Co., Ltd., Toronto; the Metallic Roofing Co., of Canada, Ltd., Toronto; the MacLean Publishing Co., Ltd., Toronto; the Hurlburt Co., Ltd., Toronto; Stauntons, Limited, Toronto; Ontario Wind Engine and Pump Co., Ltd., Toronto; Heintzman & Company, Toronto; Canada Furniture Manufacturers, Ltd., Toronto; The Williams Piano Co., Oshawa; Thomas Organ and Piano Co., Woodstock; Sherlock-Manning Organ Co., London; Goderich Organ Co., Ltd., Goderich; the Merchants Rubber Co., Ltd., Berlin; the Berlin Rubber Manufacturing Co., Ltd., Berlin; the Wm. Gray & Sons Co., Ltd., Chatham; Peterborough Canoe Company, Peterborough; the North American Bent Chair Co., Ltd., Owen Sound; the National Table Co., Owen Sound; John Harrison & Sons Co., Ltd., Owen Sound; the Noxon Company, Ingersoll; E. T. Wright & Company, Hamilton; the Hamilton Incubator Co., Ltd., Hamilton; the Waggoner Ladder Co., Ltd., London; the McClary Manufacturing Company, London; Canada Salt Co., Windsor; the Canada Carriage Co., Brockville; Victoria Wheel Works, Galt; David Maxwell & Sons, St. Mary's; C. Richardson & Co., St. Mary's; Canadian Swensons, Ltd., Lindsay; Hiram Walker & Sons, Walkerville; Brackman-Kerr Milling Co., Victoria, B.C.; Abenakis Springs Hotel Co., Abenakis Springs, Que.; Grand Trunk Railway System, Montreal, Que.; Canadian Pacific Railway, Montreal, Que.; Canadian Rubber Co., Montreal, Que.; Lake of the Woods Milling Co., Montreal, Que.; Ogilvie Flour Mills, Ltd., Montreal, Que.; Hewson Woolen Mills, Ltd., Amherst, N.S.; Peterborough Cereal Company, Peterborough; the Tillson Company, Tillsonburg; P. McIntosh & Sons, Toronto; Christie Brown & Co., Toronto; A. F. McLaren Imperial Cheese Co., Ltd., Toronto; Ingersoll Packing Co., Ingersoll; E. B. Eddy Company, Hull, P.Q.; Truro Condensed Milk Co., Ltd., Truro, N.S.; Ocean White Fish Co., Ltd., Halifax, N.S.; Canada Paper Co., Windsor Mills, P.Q.; Wm. A. Marsh Co., Ltd., Quebec, P.Q.; R. Chestnut & Sons, Fredericton, N.B.

The Canadian Government will make a display of Canadian ores and minerals, together with their resulting products, fruit, grains and grasses, maple products, honey, views of Canadian scenery and portraits of prominent Canadians.

Advance notices of the New Zealand International Exhibition show that the entertainment to be offered by the Australasian colony will be highly interesting. The scope of the exhibition has been steadily growing as additional attractions and exhibits have been arranged for. All parts of the Empire are taking advantage of the opportunity to show their products. The buildings are rapidly nearing completion and they will be in fine shape for the opening on November 1. Canadian manufacturers in considerable numbers have reserved space and the Canadian Pacific Railway Company have applied for eight hundred feet to illustrate their route across Canada. This will be sure to attract no small attention to this country. The enterprise of New Zealand in assuming the responsibility of this work and the public-spirited zeal of the commissioners in carrying it out are deserving of all praise.

New Chairmen of Toronto and Montreal Branches, C.M.A.

MR. JOHN FIRSTBROOK.

Mr. John Firstbrook has been elected to the chairmanship of the Toronto Branch of the Canadian Manufacturers' Association, for the ensuing year. The new chairman is one who can be depended upon to produce results during his term of office. He combines fine tact and a pleasing personality with vigorous business ability. The consistency with which he carries out what he undertakes is illustrated in his own business career. In 1870 he entered upon the manufacture of boxes. That was in the identical corner on which stands to-day the factory of the Firstbrook Box Company, Limited. The ability to stick to an undertaking till it is successfully completed belongs to Mr. Firstbrook in a large measure.

The business acumen, which Mr. Firstbrook has exhibited in administering the affairs of the Firstbrook Box Company, is also making itself felt in a number of other enterprises with which he is connected. He is at the head of the Northern Lumber Company, which, while it supplies the box factory with its lumber, does a large trade also in high-grade stuff. Moreover he is associated as a director with the E. W. Gillett Company, of Toronto; W. H. Storey & Son, glove manufacturers of Acton; and the Metropolitan Bank. With these diversified interests Mr. Firstbrook is a busy man.

The new chairman will bring to his position a wide knowledge of the conditions which confront manufacturers in Toronto. As vice-chairman for the past year he has been in close touch with the manifold questions with which the Toronto Branch is dealing. A programme of activity may be expected under his regime.

MR. JAS. S. N. DOUGALL.

Mr. Jas. S. N. Dougall, newly elected chairman of the Montreal Branch of the Canadian Manufacturers' Association, is one of the best known and most highly esteemed business men of Montreal.

Born there in 1853 he entered the wholesale paint, color and varnish trade at the age of 16 years. For nearly a quarter of a century he was connected with McArthur, Corneille & Company, and for 10 years of that period was a partner in the concern.

In 1892 Mr. Dougall connected himself with the manufacture of varnish, and has been for several years senior partner of the firm of McCaskill, Dougall & Company.

Mr. Dougall has always been a believer in the principle that a man's time should not be entirely devoted to his own private business, and has taken a warm interest in the affairs of his native city, and the country generally. He has been connected with the Montreal Board of Trade since 1887, and has of late been prominently identified with the Dominion Commercial Travellers' Association, of which body he was treasurer for three years, and president for two years. Recently he was elected by acclamation, president of the Dominion Commercial Travellers' Mutual Benefit Society.

Mr. Dougall is a life member of the M. A. A. A., and a member of the Canadian Railway Club; Montreal Business Men's League, and the Royal St. Lawrence Yacht Club. Mr. Dougall has been a strong supporter of the Canadian Manufacturers' Association, and a loyal member of the Executive Council and the Montreal Executive Committee. During the past two years he has been chairman of the Finance Committee of the Montreal Branch.



JOHN FIRSTBROOK,
Chairman, Toronto Branch, 1906-1907.



J. S. N. DOUGALL,
Chairman, Montreal Branch, 1906-1907.

FOREST WEALTH OF WESTERN CANADA

Vast Logging Industry which has but touched the fringe of the tree-clad valleys of the Pacific Coast.

By T. F. PATERSON, B.S.A.

The Province of British Columbia may be said to have three great industries which overshadow all others carried on within her confines, viz., lumbering, mining and fishing. It is a difficult matter to say which of these three will be predominant twenty years from now, but at the present time it must be acknowledged that that of lumbering holds the first place in importance, both as to the volume of business transacted and the number of people directly and indirectly employed.

The contribution of an industry, engaged in the manufacture of the natural resources of a country, to the general revenue, is often a fair criterion of its importance to the state. Judging the lumber industry of British Columbia on this basis, it is readily seen that its importance at the present juncture in our history is far above that of any of the others. During the fiscal year just closed we find that the department of finance drew no less a sum than $486,516.46 from this industry. Of that $76,228.17 was collected from rentals on leases and licenses on timber lands, while $410,288.29 was obtained as royalty on the manufactured product. Contrasted with this, the metal mining industry contributed the sum of $259,298.84 to the revenue of the Province. The revenue from coal mining was $94,682.45, making in all a total of $353,981.29. The lumber industry contributed nearly double the revenue obtained from the tax on real estate; over two and a half times as much as that obtained from the tax on personal property; and nearly five times as much as that obtained from the tax on wild lands. In fact, its importance is such that the Government looks to it as its chief source of revenue.



Cross Section of Giant Fir.

It is a difficult matter to estimate the exact area of timber lands in British Columbia, and it is still more difficult to say how much of this area contains timber, which is now, or will be in the future of merchantable use. The average of timber under lease is about 1,500 square miles, and the total area of forest and woodland is put down by the Dominion Statistician as 285,554 square miles. The greater portion of this is covered with small trees suitable only for local supply of fuel and timber. Everything considered, British Columbia has a comparatively large area of timber land containing some of the finest timber in the world, but from estimates made by reliable cruisers it is not thought that it will last more than fifty years. It would, of course, stand the present rate of consumption for a much longer period, but it is safe to venture the assertion that at the end of fifteen years the cutting capacity of the mills in the Province will have doubled, and cutting then at the rate of two billion feet per year the supply will be comparatively short lived.

The principal limits, and the great bulk of the timber on the coast, are located on Vancouver Island, but the coast line, from the boundary line north for three hundred miles, also contains extensive timber areas, the forest line following the indents and river valleys and fringing the mountain sides. In the interior and Kootenay districts there are extensive forests of fir, cedar and spruce, but timber is smaller and not of as good a quality.

From the international boundary north to Knight's Inlet, both on the Island of Vancouver and the mainland coast, a distance of nearly 250 miles, the principal woods of economic importance are the Douglas fir (Pseudo-isuga Douglassi), named after David Douglas, a noted botanist, who explored New Caledonia in the early twenties of last century; the red cedar (Thuya Gigantea), the yellow cedar (Thuya Excelsa), white spruce (Picea Sitchensis), and the hemlock (Tsuga Mertensiana). The most abundant and most widely distributed in this area is the Douglas fir, and it is monster trees of this variety that have made the forests of British Columbia known the world over. Red cedar is second in importance, and spruce and hemlock, although widely distributed in this area, are not found in extensive quantities. For a distance of 50 miles north of Knight's Inlet, following the coast line, the country is given up almost wholly to cedar with a sprinkling of spruce averaging about five per cent. From Takush Harbor, for 50 to 75 miles north, is what is known as the spruce area, and it is here that extensive limits have been taken up by pulp companies. The farther north the smaller the trees become, until the Alaska boundary is reached, where the timber is small and of little commercial value.

The Douglas fir, often classed by the trade as Oregon pine, is the staple lumber of commerce. It has about the same specific gravity as oak, has great strength, and has a wide range of usefulness, from making mouldings to making spars 120 feet long and squaring 30 to 36 inches. It is classed by some naturalists as a valuable pulp-making tree as well, although it is not generally recognized as such. The cedars, often of immense size, specimens sometimes being 18 feet in diameter on the stump, are the next in importance. It is out of this wood that the famous shingles of British Columbia are made. It is especially valuable for interior finishing, being rich in coloring and taking on a beautiful finish. The white spruce might be termed a first cousin to the Douglas fir, and the many uses to which it may be put makes it even of more commercial value than the latter. It is utilized largely in making doors, finishing, salmon boxes, butter boxes and fruit cases of all kinds. It is par excellence, too, the wood for pulp manufacture, which some day is bound to be one of the important manufacturing industries of the Province.

The hemlock is a common timber, and up the coast is found in considerable quantities. It is used for the same purpose as the Douglas fir.

There are many other kinds of woods, such as the large maple (Acer Macrophyllum), crab-apple, (Pirus rivularis), alder (Alus rulera), oak (Quercus Garryana), and others, but these are found in such small quantities that they are not looked upon as being of much commercial importance.



Lumbering Scene in British Columbia.

The timber lands of the Province were originally held by the Provincial Government, which, in the early history of British Columbia, sold large areas at a certain price per acre. The crown grants for these carried the right to cut all timber thereon without the payment of a royalty to the Government. There are other lands crown-granted, on which the right to cut the timber without royalty was not granted. The timber on these lands is subject to a tax of 5 cents per thousand feet, when cut and manufactured. Timber lands held under these two systems are not, comparatively speaking, large in area, and the bulk of the forest under the jurisdiction of the Province which has been alienated is held under either leases or licenses. Up to the year 1905, the privilege was given of acquiring large areas under leases at a certain rental per acre, running for a period of twenty-one years. Under this system extensive tracts of timber lands were taken up by the larger mill companies. Since the years named the above-named system has been abolished, and all lands now taken up must be acquired under the license system, which grants an area of not more than 640 acres to any one license. These licenses carry a yearly rental of $140 and the stumpage or royalty is fifty cents per thousand the same as on leases. The royalty on these is subject to change by the Legislature of the Province. All timber cut on lands on which a royalty is due to the Crown must be scaled by Government scalers and with the exception of timber lands Crown-granted since 1887, the exportation of timber in an unmanufactured state is prohibited under penalty of seizure and confiscation.

When the Dominion Government arranged with British Columbia to extend the Canadian Pacific Railway to the Pacific Coast they acquired all lands within what is known as the railway belt, an area extending 20 miles north and south of the main line of the railway. All licenses to cut timber on these lands are disposed of by public competition. Parties tendering must state the sum per square mile which they will pay over and above ground rent and royalty, and a cheque must accompany the tender. The highest bonus will be accepted. The length of any berth must not exceed three times the breadth thereof. These lands at present carry a royalty of 50 cents per thousand, payable to the Department of the Interior.

Owing to the large average size of the lumber on the coast, logging operations are of a costly nature and much more powerful machinery is required than in the eastern parts of Canada and the United States. As there is little or no snow in winter the heavy timber has to be dragged to the water over skid-roads or railways. In the earliest history of the industry logging was carried on almost entirely by ox-teams. Sometimes as many as 24 oxen, two abreast, were used to haul the heavy timber across cross-skids embedded in a roadway, as carefully made and as costly as that for the average railway. This system of logging was only applicable where the grade to the water was down hill. The ten and twelve horse teams gradually superseded the ox-team, and in turn has given place almost entirely to the large road-engine which reaches by cable, an inch in diameter, as far as a mile to a mile and a half into the woods, takes hold of a string of logs coupled together and drags them over cross-skids to the water. Another smaller engine is used to haul the logs to this road, reaching out by cable to a distance of one thousand feet on each side side of the

road, if necessary. The road-engine will soon be replaced by the locomotive and log cars, a number of large plants of that nature being now in operation on the coast. This is made necessary from the fact that the greater portion of the timber situated close to the water has been logged off and logging by railway for distances of over two miles is found most profitable.

Towing the Booms.

When the logs are put into the water they are made up into what are known as booms or rafts, and powerful tugs tow them to the mills, the tow covering a distance sometimes as great as 300 miles, the average tow being about 100 miles. A very large amount of capital is invested in the logging business, and it is one requiring a great deal of business engineering to make it a success.

Labor is costly, averaging about $3.25 per day per man. Men engaged in this occupation are very restless, and as the labor source of supply is from 100 to 300 miles away from the camps it is often difficult to keep them operating to their full capacity.

The lumber milling business of the coast region is confined almost entirely to the following places ,viz., Vancouver, New Westminster, Victoria, Chemainus, Ladysmith and Nanaimo. Among the mills are found some of the largest and best-equipped lumber manufacturing plants in the world. They range in capacity from 10,000 feet to 250,000 feet per day of ten hours. The shingle industry, a branch of lumber manufacturing, boasts of the largest mill cutting shingles in the world, and the product of these mills is considered the highest grade of any manufactured. The yearly capacity of the lumber plants of the Province has now reached the billion-foot mark, half of which can be cut by the coast mills and the other half in the mountain regions. This capacity could be nearly doubled if the mills were running night and day shifts. The capacity of the shingle mills has now reached nine hundred million, and this yearly output can be also doubled by running two shifts. In fact, both lumber and shingle plants have increased their output during the last two years to an extent hardly warranted by the market.

Getting a Market.

The securing of a profitable market for his product has been the great bug-bear of the British Columbia Coast lumberman. The local market for many years was very limited, and in fact to-day, would not be sufficient to keep one-third of the plants running. Although extensive building operations have been carried on in Vancouver, Victoria, and other places on the Coast, mill-building has more than kept pace with them. A market outside of British Columbia has to be found for at least two-thirds of the output, and that market must be found in the central and eastern provinces by rail and in Australia, Japan, China and South Africa by water. As only two of the larger mills market a portion of their product by water, most of the mills must look to the east. The prairie region is looked to take the bulk of the output of both lumber and shingles, although heavy shipments are made to Ontario, Quebec, and the Maritime Provinces. The trade to the latter places consists largely of heavy timbers, car-building material and shingles. All the British Columbia output comes into keen competition with the eastern Canadian product, and that from the Southern States, most of which is allowed in duty free. The North-West and Manitoba market is looked upon to take most of the rougher grades and some of the higher, such as siding flooring and ceiling.

The rougher grades come into competition with duty-free lumber from the United States, and the railway haul averages about 1,200 miles before the product reaches this market. The high freight rate, therefore, cuts largely into the profits and it is owing to these handicaps that dividends in the lumber business in British Columbia have in the past been few and far between. The choice timber of the Province is held by the mills now in operation, and as these limits have increased in value, the money invested in lumbering here has not been entirely unrewarded. The future, however, looks bright. The time is not far distant when three transcontinental railways will have reached the Pacific Ocean. Already extensive railway building during the last year in the Prairie Provinces has given stimulus to lumbering in British Columbia. The mills have now plenty of orders to keep them running to full capacity, and it is expected that the trade will gradually increase. Within the next six years over $600,000,000 will be spent in railway building in Canada. The Grand Trunk Pacific is estimated to cost over $300,000,000, and the Canadian Northern C.P.R., and other railways will have to build to keep pace with the general advancement. This immense amount of money will be almost altogether borrowed from the money markets of the world, and will find its way into the pockets of the Canadian people. A great portion of it will find its way to British Columbia to buy railway material obtainable nowhere else in the Dominion, and this will give an impetus to the industry difficult to measure. Never in the history of Canada has the outlook been so bright for all branches of trade. Never has there been such an influx of immigration into the Dominion as during the last year, and that for the present year, 1906, promises to exceed the most sanguine expectations.

The Western Empire.

The eyes of the world are on our great Western Empire lying between Lake Superior and the Pacific Ocean. Lands which a few years ago were thought to be barren and inhospitable as an abode for man now respond to his call with bounteous harvests. Regions where once the bison trod and the red man pitched his tent, have, as if by magic, been transformed into fertile fields. Lands where once but the coyote's howl broke the stillness of the evening air, now resound with whistle of the locomotive, the ring of church bells, and the merry laugh of children. The circle of the advancing army who have gone in to reclaim this heritage is ever widening and the time is not far distant when that great country will contain one of the largest, most prosperous and most contented populations in the world. The traveller who passes through those vast regions which are yet to be reclaimed can and will say with the poet Bryant:—

> These are the Gardens of the desert, these
> The unshorn fields, boundless and beautiful,
> For which the speech of England has no name—
> The Prairies, I behold them for the first,
> And my heart swells, while the dilated sight
> Takes in the encircling vastness.

The lumberman of British Columbia looks down and sees this advancing army. He then casts his eyes over the forest and mineral wealth of his own grand Province endowed with natural resources second to none in the world. He sees that this great multitude now taking possession of our central empire must be housed. Their railways must be built and their cities erected. The greater portion of the lumber used in this work must come from this great Western Province. This vision has caused the lumbermen and people of British Columbia generally to take heart. Money invested in this industry here bids fair to be repaid and the general feeling is buoyant. The whole West is interdependent in the march of progress, and it is safe to assert that money invested in manufacturing the natural resources of British Columbia will in the future be remunerative to a degree not hitherto dreamed of.

ADVANTAGES OF MUTUAL INSURANCE COMPANIES

A Reply to Criticisms of the "Chronicle." Long Experience Proves the Benefits of the Mutual System. Insurances at a much Lower Cost.

It was scarcely to be expected that the decision of the Canadian Manufacturers' Association to endorse the formation of Mutual Fire Insurance Companies would be passed over by the Insurance Press without more or less unfavorable comment. The community of interest between the Insurance Press and the Stock Fire Insurance Companies is sufficiently close and clear to influence the point of view, not necessarily from any sordid motive, but in harmony with the old adage "blood is thicker than water."

Our contemporary, "The Chronicle," of Montreal, in a recent issue repudiates with indignation the charge made in our July article, on the subject of "Reserves and Rates in Fire Insurance," that it is the official organ of the Stock Fire Insurance Companies, and we accept the disavowal with an expression of regret for having made the statement. The charge was made in no invidious sense, but in line with the general understanding that the various trade papers issued in the Dominion are the official organs of their respective trades, and that a paper published in the interests of the profession of insurance might not inaptly be said to be the official organ of the companies. "The Chronicle" will probably not take umbrage at our saying that they fittingly and adequately present the situation of fire insurance from the companies' standpoint, and if there be any bias or prejudice it is naturally, though maybe unconsciously, in favor of those interests.

Criticism of "The Chronicle."

We make this explanation, in passing, because we have once again to discuss an article in "The Chronicle," of July 13th, on the subject of Mutual Fire Insurance, and an understanding of the position held by it in the insurance world will serve to throw light on some of the statements made therein.

The article we refer to is of more than passing importance, because it is the view point of the most widely read Canadian journal published in the interests of insurance, on the subject with which it deals; and because of its importance we shall quote it "in extenso," but somewhat rearranged, for the purpose of enabling us to concentrate the expression of our own views in reply.

> "The Canadian Manufacturers' Association, through their Insurance Committee, are proposing to inaugurate one or more Mutual Fire Insurance Companies, being convinced that they can insure themselves at much lower rates than they pay at present. . . . . .
> In fact in the circular issued to their members, the committee acknowledge that it is clearly understood that "The Manufacturers' Association, as such, cannot organize or control insurance companies."

These two sentences are from the first paragraph, and the latter is so manifestly opposed to the statement contained in the first sentence that it carries its own condemnation.

The True Attitude.

The Canadian Manufacturers' Association is *not* inaugurating one or more mutual fire insurance companies. If "The Chronicle" had desired to correctly represent the attitude of the Association it would either have finished the sentence from the circular from which it quotes (it is now emasculated) or it would have recorded the resolution of the Insurance Committee which was approved by the Executive Council as follows:—

> "This Committee is of the opinion that such companies should be organized, and that members of the Association should assist in their organization, but that they should not be in any way connected with or controlled by the Association. Nevertheless the services of the Manager of the Insurance Department should be available to them in an advisory capacity only, until the companies are fully organized."

This correctly represents the attitude of the Association on the subject.

> "This doubtless is the result of the failure on on the part of the said Association to be permitted, through what they call their "Insurance Department" to have some participation in the management of the fire insurance business now carried on by the stock companies.

This sentence, also from the first paragraph, is an opinion of the writer which has appeared several times previously in the same paper, and which the Association has taken pains to make clear in the same journal. It is not justified by anything that has been said or done by them. That it is now repeated can only be regarded as confirming the understanding that when one will not be convinced it is useless to pursue the subject. However, it is the opinion of the writer of the article, and he is at liberty, of course, to hold and express it; we are at equal liberty to give it the most unqualified repudiation which we unhesitatingly and unreservedly do.

The Fundamental Differences.

> "Fire, like other insurance is governed by the laws of average and just as in life insurance those who live long pay for those who die prematurely, so in fire insurance those risks which last long or do not burn pay for those which go up in smoke. In other words, if the premiums of the former do not afford *sufficient to pay the losses of the latter, with, of course, a margin for expenses, etc.*, the result of the business is unsatisfactorily if not disastrous."

The italics are ours because we desire to emphasize a point that might otherwise be overlooked. The "etc." means expenses as now incurred and profits to shareholders which constitute fundamental differences between mutual and stock fire insurance; what else it means is left to conjecture.

> "The difference between mutual and stock fire insurance is that with the former *the policyholders are also the shareholders and assume all the liability entailed thereby.*"

The italics are *not* ours, the writer uses them to give them special significance, and as they are the only words in italics in the entire article, it is to be presumed they may be regarded as an incontrovertible argument against mutual fire insurance.

We admit the truth of the reasoning and the conclusion—"the policyholders *are* the shareholders, and *do* assume all liability entailed thereby." That is precisely the point that is in favor of mutual insurance companies, and so far from being a detriment is an advantage to the members. We invite careful attention to the concluding part of this article. The knowledge of the fact means greater care in every direction, and as a result seventy farmers' mutual companies in Western Ontario do business at 60 cents for three years against rates of $1 and $1.50 for the same class of business in the same territory by the stock companies. Similarly the "Canadian Millers of Hamilton," does business on an admittedly hazardous class of risks at rates far below those charged by the stock companies on the same class of risks. Let "The Chronicle" examine the record of the Canadian Millers, and publish the result as proving what it means to be practically shareholders and mutually obligated to bear its liabilities.

Benefits Go With Liabilities.

But the argument is incomplete. If the members assume all liability, they also get all the benefit, and those who have taken the trouble to trace the experience of mutual fire insurance in respect to manufacturing risks must admit that the liability idea is chimerical while the benefits are tangible and consistent. If "The Chronicle" has investigated results for itself, and can reach any other conclusion let it publish the facts; if it has not, it may like to know that we have and we are quite satisfied that manufacturers holding mutual fire insurance do so much better in rates and conditions that they will not be frightened by the liability bugaboo.

But on this question of liability is there nothing to be said on the other side? The stock companies unhesitatingly state that they must receive from the assured losses, expenses, profits, etc., and when the premiums do not meet this result what do they do? They raise rates of course! Is not this the assumption by the policyholders of the liability of the stock companies?

> "We may ask whether the record of the business in Canada is encouraging to a proprietor to share in such a liability, and likewise whether the Manufacturers as a whole are inclined to assume that liability?"

Excessive Rates Paid.

We believe the Manufacturers of Canada are paying excessive rates to meet losses incurred in classes of business other than their own. The Government returns clearly demonstrate that the experience of the companies for twenty-five years back has been exceedingly favorable in years other than when conflagrations have occurred; the conflagrations it is well-known have occurred in commercial and residential districts, not in manufacturing centres. The obvious conclusion, therefore, is that the fire insurance business of the manufacturers has been at least as profitable as the general business of the country, eliminating conflagrations. This is about as far as one can reach a conclusion from the general data furnished in the "Blue Book." Can "The Chronicle" and the stock companies furnish statistics that upset this general conclusion? If they can, will they not deign to produce them, and definitely settle the controversial aspect of the situation? No surer method could be found of preventing the organization of mutual fire insurance companies, than the production of evidence that the manufacturers have been fairly treated by the stock companies.

> "Many, we believe the greater portion of, property holders when taking out a contract for insurance, desire to have insurance pure and simple, without being called upon later for an extra payment or deduction in case of loss."

Liability Met by Increased Premiums.

Exactly, the Manufacturers want a "pure and simple" contract without a demand for an extra premium, or the necessity of accepting so many cents on the dollar when a loss happens. Does "The Chronicle" imagine that the mutual companies are sinners in these respects, and the stock companies are only righteous? Will "The Chronicle" please quote a solitary mutual fire insurance company insuring manufacturing risks that in the whole course of its experience has called upon its members for more than 75% of the tariff or stock company's rate! Will it please record the name of any similar company that at any time has failed to pay every fire claim promptly and in full! Will it at the same time furnish the names of the stock fire insurance companies which have signed an agreement not to pay more than 75% of the losses incurred in the recent San Francisco conflagration?

Mutual Policies Accepted.

> "They bargain for that and are aware that the policy will be accepted as collateral security by the banks in case it is needed, which is not the case with a mutual fire policy having a liability (however remote) attached to it."

We have merely to quote this extract to enable the members of the Association to form their own opinion about it. There may have been a time when the banks declined to accept a mutual fire policy as collateral security, but that period has long since passed. The fact is that the banks readily accept policies of this kind, and we know this because we have tested it in dozens of cases; there is not a bank or trust company that now declines to accept policies of mutual companies.

Success of Mutuals Admitted.

> "It is all very well to point to the success of the New England Mutuals, and we are quite willing to admit that those companies have won their prestige by careful underwriting, and a system of inspection, but in the last ten or twelve years the stock companies have been successfully competing with the former in their special field of highly protected risks through the organization known as the Factory Insurance Association of Hartford. But the field for that business is as yet extremely limited in Canada."

This extract is a great admission on the part of "The Chronicle" of the success of the New England Mutuals. In making this one concession the author of the article is doing no more than paying a just tribute to a class of companies that have presented unique features and results in the insurance world. Some of the New England Mutual companies date their organization back to 1835 and "The Chronicle" admits that within the last ten or twelve years the stock companies have awakened to the necessity for meeting their competition by an organization known as the Factory Insurance Association of Hartford. May not this emulation though tardy, be regarded as the highest tribute that can be paid by the stock companies to the power and success of the rivals they are successfully competing with? It is surely gratifying that the stock companies in following the same lines as the New England Mutuals are able to quote rates ,terms and conditions so close that they are able to compete with them. Imitation is the sincerest flattery! Why not extend the same competition to Canada?

Obviously the reason is in the last sentence we have quoted above, "the field in Canada is extremely limited." We wonder if "The Chronicle" has any idea of the extent of the Canadian business that is now carried out by the New England Mutuals, or realize the rapidity with which the business is being transferred to them? They would scarcely regard it as extremely limited if they knew. Perhaps they do. The United States Companies for the last 60 years held the same view, and when the New England Mutual Companies succeeded in entrenching themselves in a position that defied the serious competition of the stock companies, they adopted the organization known as the Factory Insurance Association, and at the best the business they are doing, which our contemporary calls "successfully competing with them," is but a mere bagatelle compared with that on the books of the New England companies. Now, if there is any doubt on this point the figures can be obtained to prove whether this statement of the case is correct or not. In respect to the Canadian business it seems very much a case of history repeating itself.

No Conflagration Hazard.

> "We can scarcely endorse the statement, taken from the circular before us, that "broadly speaking, the manufacturers' risks are outside of the conflagration area," for there are numbers of factories in Montreal, Quebec, Toronto, and other large centres that are directly exposed to the "conflagration hazard."

Of course there are a number of spots in Montreal, Quebec, Toronto and other large centres where there is a congestion of manufacturers' risks. But this does not detract from the statement that "broadly speaking, the manufacturers' risks are outside of the conflagration area." The members of the Manufacturers' Association will be able to judge whether our statement is or is not correct. If it is incorrect they are at liberty and ought to condemn the whole principle of mutual insurance, for if a statement of this kind is incorrect, and the manufacturers are, broadly speaking, in a congested area and subject to conflagration hazard, mutual fire insurance companies are not likely to be successful, and should be deservedly given a wide berth. This point had better be fully realized at the outset, for there is no use living in a fool's paradise such as the members of the proposed companies would be in, if, broadly speaking, manufacturers' risks were subject to the element which has ruined so many stock companies.

> "We commend the caution of the manufacturers in placing a limit of $5,000 upon any one distinct plant, but we doubt whether such will draw a policy from plants requiring large amounts of insurance, and the large plants are admittedly much better hazard than the smaller factories where the necessary care and attention becomes too costly. We quite appreciate the desire of the manufacturers in endeavoring to obtain cheaper insurance, but something more is requisite to make a success of mutual companies, viz., good underwriting and discrimination in rating the various risks, in which we opine the chief danger to the scheme will be, since nearly everyone firmly believes his risk to be as good if not better than his neighbor's, the difficulty of persuading the proprietor that for a small annual advantage in his premium on $5,000, coupled with a contingent liability he is not better off with the security of a stock company and no liability."

The Result of Success.

There is one point in the scheme of Mutual Fire Insurance that "The Chronicle" commends, that is the limit it is proposed to carry on any one plant. Apparently this is not commended because it is sound underwriting, but because the amount is so small that it will not cut any serious figure in the business carried or placed by the average manufacturer. The true test in this regard will be applied when companies are organized. For the present all that can be said is that the definite responses so far received from the members indicate a general desire to take advantage of improved conditions, even although the advantages only relate to a small part of the total insurance carried. Even the most unsophisticated man will not be slow to conclude that if two companies, carrying $5,000 each on any one risk are successful, it will not be very long before others are organized in the same field, and for the same purpose, until, as is found in the country to the south of us the writing capacity of the mutual companies attains considerable proportions.

> "Without wishing to throw too much cold water upon a new enterprise, we should not be surprised for these reasons if the undertaking be still-born. . . . . The formation of these companies should be welcomed by the Fire Underwriters, as it will afford the policyholders an opportunity of viewing the insurance question from the other side, and make them familiar with the losses and risks, attendant upon the business."

Criticisms Contradictory.

The article in "The Chronicle" begins and ends with a contradiction. For these two sentences dispose of one another. If the formation of the proposed mutual companies should be welcomed by the Fire Underwriters, why should "The Chronicle" throw any cold water upon the enterprise? It is refreshing to learn that they will be welcomed by the Fire Underwriters, even although the basis of the welcome is assumed to be the eye-opener, such companies will receive from the losses and risks attendant upon the business. The thought that the companies will be welcomed for the buffetting they will receive, is not a new one, nor will it cut any appreciable figure in the minds of those who have the organization in hand.

> "In connection with the above it is interesting and significant to learn as stated in our last issue, that at a special meeting of the Massachusetts mutual Fire Insurance Union, held recently, the subject of increasing rates was considered, and it was unanimously voted to adopt the advances promulgated by the 'New England Insurance Exchange.'"

The Situation in Massachusetts.

Why is it interesting and significant to learn the fact stated herein? Obviously in the writer's mind it is an admission of weakness in the system of mutual fire insurance and an evidence that even mutual companies find it necessary, and are glad to follow the tariff organizations in increasing rates. This is doubtless the effect the writer wishes to produce in the minds of his readers, and on the face of it, and as it is stated in the paragraph quoted, it is well calculated to accomplish the desired effect.

We wonder, however, if the writer has the slightest knowledge of the Massachusetts Mutual Fire Insurance Union, or knows more of that organization than is recorded in a press despatch, which is quoted because it seems to

strengthen the lesson it is used to teach. We opine not, otherwise he would not have exposed himself to the very simple and effective answer that must now be given.

The Real Situation.

The Massachusetts Mutual Fire Insurance Union is composed of twenty-one companies, organized under Massachusetts law, all writing a general mercantile, manufacturing, and farm business; they practically all belong to the New England Insurance Exchange (which is the corresponding body in New England to our own Canadian Fire Underwriters' Association), and as they write all kinds of property, and are exposed to conflagration hazard like the stock companies with which they are affiliated, they naturally, for their own interest, get all the rate they can on all the properties they write, to say nothing of the obligations they are under, as practical members of the New England Exchange.

The New England Mutual Companies insuring only protected manufacturing risks are not members of the "Union," (as might be implied in the name and as the writer of the article might desire to have inferred), they are not exposed to conflagration hazard a vital difference between the two classes of mutual companies, and *they* have not raised rates.

Profits Return to Policyholders.

But let us go back for a brief reference to the companies forming the Massachusetts Mutual Union. If they followed the action of the New England Exchange in raising rates, was it that the increases were necessary? Let it be noted that it does not so much matter what initial rates are imposed by the mutual companies, for the profits they pay to the policyholders will bear a corresponding increase. It is to their interest to get all the initial rates they can, for the larger the premium, the greater the profits paid back to the policyholders, and the more effective becomes the comparison between Stock versus Mutual Insurance. The point will bear emphasizing that when rates are increased in stock companies, the benefit goes to the shareholders; when they are increased in mutual companies they go to the policyholders who are the shareholders. This is the doctrine of the article we are criticizing, and it must be so as we have previously admitted.

Insurance Union.

Organized.	Name of Company.	1904 Net. Premium.	Profit to Policyholders.	1905 Net Premium.	Profit to Policyholders.
1856	Abington Mutual	$ 33,470	$ 11,279	$ 36,905	$ 11,814
1835	Berkshire Mutual	49,401	17,447	55,032	18,932
1833	Cambridge Mutual	73,521	40,303	77,374	32,495
1846	Citizens' Mutual	82,720	44,628	76,357	39,912
1837	Dedham Mutual	36,117	15,475	33,342	14,446
1855	Dorchester Mutual	226,442	68,294	252,086	79,873
1847	Fitchburgh Mutual	99,701	33,001	112,347	34,438
1830	Hampshire Mutual	14,641	5,257	16,248	6,353
1826	Hingham Mutual	85,696	41,276	86,489	40,679
1843	Holyoke Mutual	145,864	65,329	158,168	62,516
1832	Lowell Mutual	53,145	18,776	54,661	19,783
1846	Merchants' and Farmers' Mutual, of Worcester.	98,274	35,486	93,072	36,994
1828	Merrimack Mutual	115,274	47,752	112,400	37,138
1826	Middlesex Mutual	167,495	80,429	161,409	75,013
1827	Mutual of Springfield	20,151	15,989	22,983	19,385
1861	Mutual Protection of Boston	36,419	11,509	38,392	11,643
1825	Norfolk Mutual	84,636	47,935	77,429	44,099
1851	Quincy Mutual	145,582	60,721	147,075	59,896
1838	Salem Mutual	41,548	12,029	44,169	12,476
1848	Traders' and Mechanics' Mutual	172,554	72,011	191,678	70,827
1823	Worcester Mutual	139,970	92,219	124,472	78,254
		$1,922,621	$ 837,145	$1,972,088	$ 806,966
		Average 43¾ per cent.		Average 40 9-10 per cent.	

"The Chronicle" could not well have offered us a more favorable opportunity of showing the advantage of mutual fire insurance than by an unwise use of an illustration the full meaning of which it is apparent, it failed to realize.

Record of Mutual Companies.

The Massachusetts Mutual Fire Insurance Union is composed of the companies named above, and against each we show the profits paid back to the shareholders, i.e., the policyholders (according to "Chronicle" doctrine), in the years 1904 and 1905.

The Necessary Inference.

If these 21 companies forming the Massachusetts Mutual Union, writing a general business, subject to conflagration hazard have been able to return to their members the figures given above, (which are open to examination and check by any one sufficiently interested), is any less favorable result likely to be achieved by mutual fire insurance companies for manufacturers' risks unexposed to conflagration hazard? And is it necessary to cite any more convincing illustration of the benefit of Mutual Fire Insurance than this which arises from the desire of "The Chronicle" to seize upon an imperfectly understood condition to point the moral in the opposite direction. All we ask is that the facts be considered fairly; if we have incorrectly quoted a single figure or omitted to deal with any other consideration that has a bearing upon the subject, let us be corrected and judged accordingly.

Finally, what has been and is now being accomplished by mutual fire insurance companies, offers the greatest encouragement to the members of the Canadian Manufacturers' Association in the formation of companies of their own. It will not all, however, be easy sailing; adverse winds will blow and storms may retard progress, but if they are properly organized and managed, success must crown the effort.

The World's Rail Industry.

England was the pioneer manufacturer of iron rails in large tonnages. The earliest rails were flat strap rails. Cast iron rails were tried, but were not very successful, and were used to but a limited extent. The bull head section of England, and the T rail in the United States, had been well developed before the advent of the steel rail. Except possibly for experimental purposes, rails were not made of steel until the advent of the Bessemer process. The first Bessemer steel rail ever laid was early in 1857, at Derby Station, on the Midland Railroad. It stayed there 16 years, although iron rails at that point had frequently to be taken out in three months. England and the United States both adopted the Bessemer steel rail rapidly, and in 1877 the United States made more steel than iron rails. In 1879 the United States first made more steel rails than England, making 610,682 gross tons of Bessemer steel rails, and has since kept in the lead.

The greatly increased production of the United States was necessary to supply the domestic roads. It was not until 1890 that the United States exported as much as 10,000 tons of steel rails. England, on the other hand, depended largely on the export trade; in the early days chiefly to the United States, but in 1876 the United States imports had dwindled to 256 tons, although England's total exports in that year were 369,000 tons.

The German rail industry has become of international importance only within the last decade, prior to that time the German production going almost exclusively to the domestic roads. There was little growth until after 1896 in German production, the total being 469,000 tons in 1875 and 582,000 in 1896. Since then German rail production has rapidly increased, and the exports are now large.

CALGARY—AN INDUSTRIAL CENTRE

By C. W. PETERSON.

CALGARY—INDUSTRIAL, COMMERCIAL AND FINANCIAL CAPITAL OF THE GREAT MIDDLE WEST.

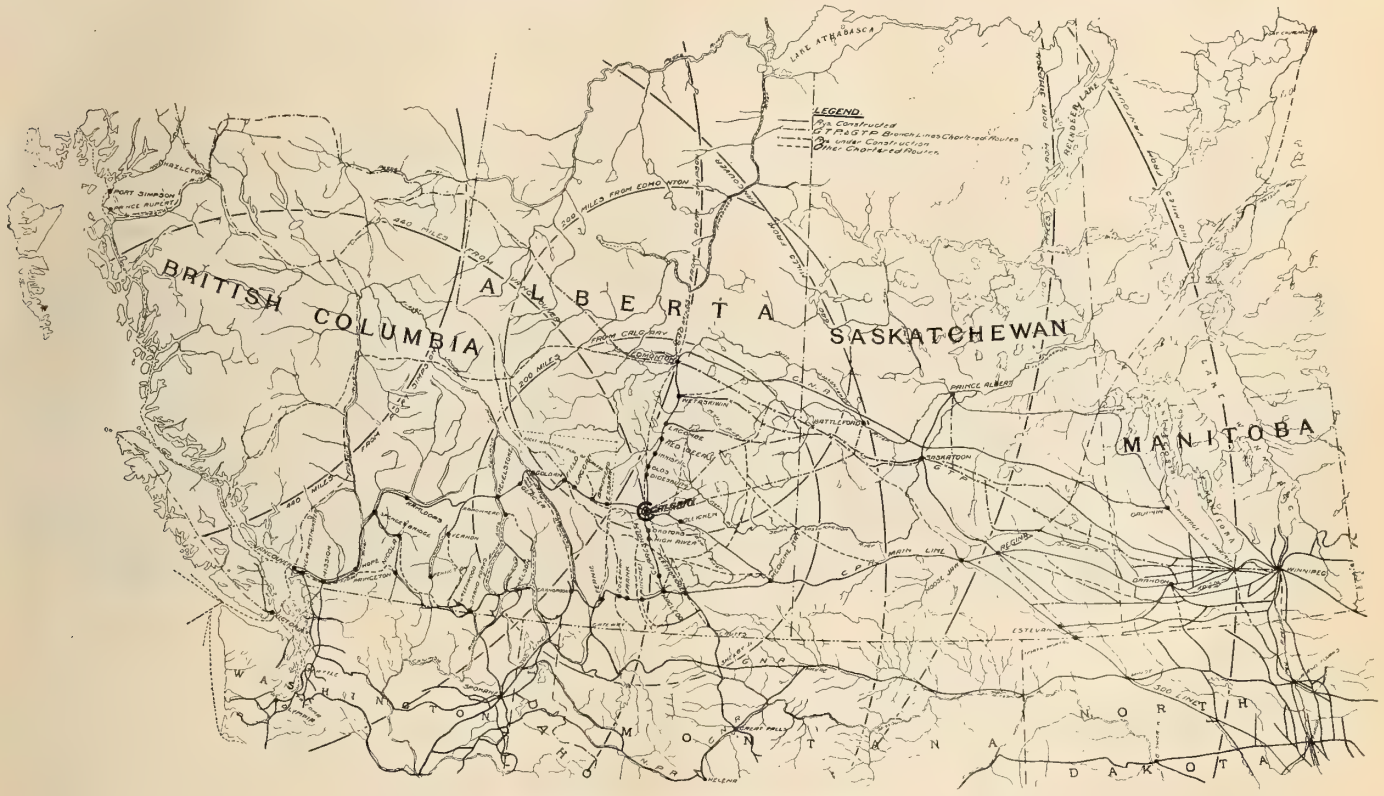
SOME of the best informed authorities readily fall into the plausible error of estimating the future progress of Western Canada by the history of the development of the Western States. This is a fallacy. No reasonable comparisons can be drawn as the conditions of the two countries differ widely. At the beginning of the nineteenth century the population of the United States equalled almost exactly that of Canada at the beginning of the twentieth century. The settlement of the former emanated entirely from European countries, while the great bulk of the immigrants now coming into the Canadian West hail from the United States. It is a significant fact, that Canada has not alone all Europe to draw upon for settlers, but also the over-crowded States immediately south of the line, many of them contiguous to the Western Provinces. Such being the case, it is reasonable to suppose that the colonization of Western Canada will proceed at a vastly rapider rate than did the settlement of the Western United States.

Furthermore, it is safe to assume that the population of Western Canada will be much greater than that of the Western States. It is a notorious fact that enormous areas of waste land are included in the States south of the line, while almost every acre of the Canadian prairies will lend itself to agricultural or pastoral pursuits. This is a very important fact, and one that the manufacturers of Canada will do well to consider carefully. Multitudes of settlers are now finding their way to the "Last West" from every corner of the civilized globe, and it is not overstating the case to predict that within a few years the density of settlement in the prairie Provinces will remove the Canadian centre of population from the Eastern Provinces to a point west of Lake Superior. Evidently the time is ripe for the Canadian Manufacturers to prepare for the enormous demands of the West, and the forthcoming excursion of the Manufacturers' Association of Western Canada will bring the changing conditions of affairs more clearly before the minds of the members than any other expedient that could be invented.

The American Invasion.

It is a well-known axiom that, other things being equal, a large consuming population will ultimately draw industries to its midst. Unless the manufacturers of Canada look sharp, the wide-awake business men south of the International boundary, who are continually on the still-hunt for profitable investment, will establish industrial enterprises in Western Canada and capture the market from Eastern manufacturers. This is no idle dream. The process has commenced. American capital has already launched several enterprises in Calgary that will come in direct competition with Eastern Canadian industries.

There is another factor for Eastern manufacturers to reckon with. "Made in Canada" appeals largely to sentiment. It appeals strongly to those who have been born and reared within the influence of our large eastern cities, and who, perhaps, from childhood have been familiar with the names of our great manufacturing concerns. Custom and sentiment impel them to patronize home made goods. But is the same loyal support to be expected from the mass of our fellow-citizens that hail from south of the line? To them the words Toronto, Montreal and Hamilton are mere empty



Map of Calgary and Surrounding Country.

sounds. Chicago, St. Paul, Omaha, etc., convey a different meaning. The names of United States manufacturing enterprises are familiar. They have been patronized by them solely before emigrating and, other things being nearly equal, they prefer to buy what they know all about to taking chances on goods manufactured in Canada. Yet, these same people are intensely loyal to any industry flourishing in their midst. Concerns that have started manufacturing in the West are well aware of this fact. The people of the West will support them.

The Great Northern Railway is rapidly pushing its lines northward into the Canadian West. The mileage to United States manufacturing cities will now be shorter than ever. J. J. Hill will not be satisfied with hauling agricultural products and returning empty. His energies, and they are considerable, will be devoted to developing markets in Canada for United States manufactured and other products. No stone will be left unturned to provide return freight without which the Great Northern cannot compete fairly with the Canadian lines.

The Location.

The Canadian West is a great country, and will contain ere many years a number of large industrial centres. These centres are fairly well indicated now. The most prominent between Winnipeg and the Pacific is undoubtedly the City of Calgary. To refer to the industrial openings existing in that city involves almost a forecast of what Western Canada will ultimately demand in the way of manufactured products. The West possesses a wealth of raw materials. The forests, mines and gigantic agricultural and live stock industries contiguous to Calgary, are particularly lavish in this respect. The shrewd "captains of industry" in Canada and the United States are beginning to comprehend the vast resources of Alberta and to recognize that the present is the psychological moment. The West is loyal to its industries and to the men behind them, and those who cast their fortunes in with the people of Western Canada will reap their reward.



View of Calgary.

Industrial Calgary.

Calgary easily occupies the position of the great industrial centre of the middle West. The city has grown with mushroom rapidity. The census of 1901 gives Calgary less than 5,000 inhabitants. The most recent directory census places the population at over 20,000.

The Calgary Brewing and Malting Company's plant is equipped with the most modern machinery, and has a capacity of 100,000 barrels, or 2,600,000 gallons yearly. One hundred and six hands are employed.

The Alberta Portland Cement Co has a mammoth plant, with a capacity of 700 barrels per day, employing about one hundred and fifty men. This is one of Calgary's most important industries.

The Standard Soap Company, Limited, has one of the most up-to-date soap factories in America. The plant has a capacity of 2,000,000 pounds per year. Thirty-five hands are employed, receiving $500 per week in wages. The company is going to add materially to the plant shortly.

The Calgary Milling Company, Limited, has an elevator with a capacity of 225,000 bushels, a flour mill which turns out 175 barrels of flour daily, and owing to the increased demand for their flour at the branch offices at Hong Kong and Yokohama, will erect a mill this year with a capacity of 1,000 barrels a day. They employ twenty-two men, and on completion of their new mill will employ one hundred men. The branch house at Vancouver is supplied from Calgary, and they will this year erect an elevator there with a capacity of 500,000 bushels in which to store Alberta Red Winter Wheat.

There is also located at Calgary the Canadian Pacific Railway General Repair Shops, consisting of an erecting and machine shop.

Among the other important industries are the Western Milling Co.'s flour mills, Cushing Bros. Company, Limited, planing mills, the Ean Claire & Bon River Lumber Co., the Western Planing Mills, the Great West Saddlery Co., the Brackman-Ker Milling Company and P. Burns & Co., meet packers.

A Distributing Centre.

No special stress need be laid on the importance of locating industries at the most advantageous distributing point. Calgary is to-day recognized as being the strategical point between Winnipeg and the Pacific Coast. Business houses in Eastern Canada who cater to the Western trade, have clearly perceived that this field cannot be properly worked from Winnipeg and Vancouver. They have found that it is imperative to open up in the Middle West, and, after carefully looking over the country, have considered it in their interests to select Calgary as the Western distributing point. Numerous permanent warehouses have been erected at Calgary during recent years by some of the largest wholesalers in the East, and Calgary is now supplying the enormous area lying between Swift Current and Revelstoke, north as far as settlement reaches, and south to the Boundary.

The Canadian Pacific Railway Company now maintains a Grand Divisional point at Calgary, with a General Superintendent, Assistant Freight and Passenger Agents, Car Distributor, Claims Department, and all the other officers incidental to a rapidly developing distributing and industrial centre. The Grand Trunk Pacific and the Canadian Northern are building to Calgary simultaneously with the construction of their main lines of railway and the Great Northern will reach Calgary before any other point of importance in the West. Within four years, probably within two years, Calgary will be served by four great railway systems.

Financial Position of Calgary.

There are branches of twelve chartered banks in Calgary. Those not conversant with western conditions might argue that twelve banks is a somewhat generous allowance for a city of twenty thousand inhabitants. It must, however, be taken into consideration that no matter how dense the population of Western Canada may become, cities—big cities—will not be plentiful. Railway construction is preceding settlement, and the commanding geographical position of the embryo distributing centre, is clearly indicated. Here wholesale houses and industries naturally locate, and such enterprises will demand the best banking facilities. Here they find they can most economically and efficiently serve the greatest possible area and population. Distributing centres every hundred miles or so, such as were established in the East through force of necessity, prior to the advent of railways, will not be a feature of Western development. The shrewd financiers who control Canada's great banking concerns are well aware of this fact and, after sizing up the West, decided that Calgary would always be the commercial and industrial centre of the Middle West, and backed up their opinions promptly by opening branches there.



One of Calgary's Industries.

Power and Fuel.

No point in the West equals Calgary as a fuel supply centre. Extensive coal beds surround that city, and coals are available ranging in quality from the soft lignites to the true anthracites. The Canadian Northern Railway is now hauling coal for its locomotives from the rich fields adjoining Calgary, and the Grand Trunk Pacific will also depend for its fuel upon these deposits. Calgary industries are now using steam coal at a cost of $2.50 per ton only.

The opening up of a new coal mine, the Bankhead Colliery, by the Canadian Pacific Railway Company, some eighty miles west of Calgary, gives promise of being of incalculable advantage to that city. A branch line of railway has already been constructed to the mines, and development operations are being actively prosecuted. This mine now has an output of 3,000 tons per day, if required. No expense has been spared in its development, hence coal is mined at a minimum of cost. Already enough has been produced during development to indicate that while there is a great variety in the class of coals so far as crushing is concerned, they all possess splendid heating qualities.

In addition to the C.P.R. mines, coal is produced at Blackfoot, Fish Creek, Sheep Creek, and Knee Hills. A railway to the latter point is projected. The Knee Hill is an excellent domestic and steam coal, and will be placed on the Calgary market at a very low price.

Lighting Facilities.

One hundred 1,200 candle-power arc lights supplied by a municipal plant, are in daily use in Calgary. This plant has just been installed at a cost of $60,000. Six thousand incandescent lights can also be supplied. An additional $20,000 is now being spent to enable the plant to be operated night and day, so that power and light can be supplied continuously. Light costs from 14 to 16 cents per watt hour, according to amounts used, with 15 per cent. off if paid within a certain date. Base price for power is 12 cents per kilowatt hour with discounts from 10 per cent .to 50 per cent, the 50 per cent. discount being used when the power used reaches over $200 per month.

A private company also supplies electric light and power at a moderate cost.

The Gateway to the Orient.

A glance at the accompanying map will show Calgary's commanding position. Flour is now carried at fifty cents per barrel from the Pacific Coast to Yokohama, a distance of over 4,000 miles. This illustrates how insignificant is the cost of ocean freight compared with railway transportation. From Calgary to Vancouver via the C.P.R. is 440 miles. From Edmonton to Port Simpson via the G.T.P.R. will be 640 miles. Consequently the wheat from the rich agricultural lands of Alberta from Edmonton and west thereof, to the boundary, will reach tide water via Calgary. The western grain inspection system is now centred in Calgary. The oriental market for our winter wheat and flour is developing with astounding rapidity, and with it, the milling and elevator capacity of that city. The next ten years will make Calgary one of the prominent grain and milling centres of the world.

WHAT MAKES PLUMBING EXPENSIVE

Excessive Demands of Winnipeg Craft.

A STRIKE has been declared by the union plumbers and steamfitters of Winnipeg, in which the high-handed demands of the workmen are even more pronounced than usual. On June 30th the following agreement was presented to the employers, with a demand that it be signed instantly. A general refusal brought on the strike. The comments on the agreement were issued by the employers to make their position clear:

Agreement Presented by Union.

Clause 1. Master plumbers, when employing plumbers, gas, steam and sprinkler fitters, shall employ none but members of Local 62, or men willing to join.

Clause 2. That eight hours shall constitute a day's work—8 a.m. till 12 noon, and 1 p.m. to 5 p.m.

Clause 3. That wages be from 40 to 52½ cents per hour.

Clause 4. That overtime be time and one-half till 12 p.m., after that double time till 8 a.m. Time and one-half for working straight night shifts. Double time for Sundays and legal holidays—New Year's Day, Victoria Day, Dominion Day, Labor Day and Christmas Day; other holidays are optional with the men whether they work or not at single time.

Clause 5. On country work at least one first-class journeyman shall be sent from the city; journeyman to be member of Local 62, and shall have his board and transportation supplied in addition to his regular wages.

Clause 6. No plumber shall do fitting and no fitter shall do plumbing.

Clause 7. No fitter shall be allowed more than one helper.

Clause 8. That one apprentice be allowed to each shop, and said apprentice to be registered with Local No. 62.

Clause 9. That no member of Local No. 62 do lumping or sub-contracting.

Clause 10. That this agreement stands till June 1st, 1907.

Demands Unfair and Pernicious.

The injustice of Clause 1 scarcely needs pointing out: a man who has left the union on account of unfair treatment, or who has conscientious objections to joining it (and there are many such, for reasons which will appear below), must leave the city or find other employment if this clause be enforced. On the other hand, the employer is restricted in his choice of men to such as are acceptable to the union.

Clause 3 is a demand for an advance of wages rrom last year's rate of 35c. to 50c., and without notice. The minimum rate of 40c. is especially considered too high, as many of the men admitted to the Union are very poor mechanics and not worth even the old rate of 35c., while if the minimum rate be not fixed too high, an incompetent man, if he be willing to learn and will accept what he is worth to begin with, can often be considerably improved by a careful employer and so be enabled to earn higher wages. In the scarcity of good mechanics this is an important consideration.

Clause 4 calls for rates of pay for overtime which are obviously excessive.

Clause 5 can readily be seen to be an impertinence, as attempting to control work outside of the city.

Clause 6 is also unjustly restrictive and scarcely needs comment, as it is frequently advisable, in order to save time and money, to put a steamfitter to a small job of plumbing or vice versa.

Clause 7 is bad, as a fitter with only one helper can not handle heavy pipe or even long lengths of medium pipe.

Clause 8 will not permit a shop with 50 men to have more than one apprentice every four years, in spite of the continual cry that sufficient trained men cannot be had. Nearly every employer prefers trained men at high wages to the poor mechanic at low wages.

Clause 10 makes no provision for due notice as to a new agreement. The employers contend that any agreement as to wages to be paid in June should be made in January, so that contracts accepted in February and after may be figured on a proper basis.

You will doubtless consider these rules sufficiently impossible, but they are not all. Union men have a set of secret rules known as working or shop rules, as to which the following points should be noticed:—1. They are restrictive of the amount of a day's work, so that Union men will not now do a fair day's work. The rules also, among other things, forbid a man to ride a bicycle during working hours, or to use a soldering iron, (and for many purposes a soldered joint is as good or better than a wiped joint and much quicker and cheaper), or to use certain factory-made joints and appliances, etc.

2. The men are fined $25 for any infraction of these rules.

3. A fine of $25 is imposed for divulging that such rules are in force, and to aid in the concealment, the Union instructs the men, when refusing to do anything in contravention of these rules, to state that their objections are of entirely a personal nature. Two years ago, the shop rules of the local Union were printed for private distribution among its members; last year they were not printed, the men being required to memorize them from the single copy in the secretary's hands. The reason for this is, that a code of working rules is authorized by the United International Association, and every local branch is required to enforce these as far as possible and in the measure of its strength. It is for a fuller enforcement of these rules that the local union is now striving. What these rules mean in their complete state may be seen from the copy of them which is enclosed herewith.

In view of the above facts and in the interests of the public equally with their own, the majority of responsible plumbing firms have decided to run their businesses in the future in complete independence of the union and its shop rules. Good men will be paid good wages, and others in proportion, but all limitation of output must go.

Working Rules of the United Association of Journeymen Plumbers and Gas Fitters.

Article 1. The members of this union will work for master plumbers who employ only members in good standing in Local—, United Association of Journeymen Plumbers and Gas Fitters. This section shall not apply to

members in the employ of federal, state, county or municipal government.

Article 2. The wages for journeymen plumbers shall be $4.50 per day for eight hours, and the wages for journeymen gas fitters shall be $4.50 per day for eight hours.

Article 3. Eight hours shall constitute a day's labor and the hours of labor shall be from 8 a.m. to 12 a.m. and from 1 p.m. to 5 p.m. except Saturday, which shall be from 8 a.m. to 12 a.m., with pay for the four hours only.

No less than four hours' time shall be charged to employer for any work performed during either half of any one day. When a member reports for work at 8 a.m. at shop in which he is working, or where he has been notified to report for work, and is not put to work, he shall be entitled to and receive four hours' pay.

Article 4. From 5 p.m. until 7 p.m. shall be paid at one and one-half the regular rate of wages. After 7 p.m. and Christmas Day, New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Washington's birthday and all Sundays shall be double the regular rate of wages. Any member working on Saturday from 1 p.m. until 5 p.m. shall pay one-half the regular double time to this Local, and no member shall work on Labor Day without permission of this Local.

Article 5. Members working outside this city shall be subject to all the considerations of these rules and in addition thereto shall have their board and railroad fare furnished, traveling time to be paid for at the regular rate of wages; Sunday and night traveling to be paid for at the rate of single time. Members working within twenty-five miles of this city shall have their fare paid to and from this city once a week.

Article 6. No laborer employed by master plumbers shall do any work inside building except digging.

Article 7. Shops shall have a regular pay day on every Saturday, not later than 12 a.m., and shall pay in full up to the previous Friday night.

Article 8. We will not put in any building any of the following goods. Combination soldering nipples, combination ferrules longer than four-inch, lead bends with ferrules attached, long lead traps, nor traps with ferrules, soldering nipples or soldering unions attached, nor drawn nor cast lead bends up to and including two-inch, nor pipe cut by power machines, or by anybody other than members of this Local. Nipples up to twelve inches long and pipe larger than two-inch in diameter excepted. All nickel plated vents and waste pipe connections to floor and wall to be wipe joints, slip joints to same to be dispensed with.

Article 9. No member of this Local shall be allowed to furnish any of the following tools: Stocks and dies, iron pipe cutter or plumber's furnaces, or vice or blow torch.

Article 10. No member of this Local shall be obliged to subscribe to any form of insurance.

Article 11. No member of this Local shall go to work in any shop where another member has quit work by reason of a violation of these working rules until ordered to do so by the business agent.

Article 12. Where the Local has doubts about a member or members as working detrimental to this Local's interests and cannot furnish satisfactory evidence to Local upon investigation, the Local may call out such man or men by a majority vote at any meeting, and said member or members will not be permitted to work in same shop again for a stated length of time. Any member violating any of these rules, or any member knowing of another violating any of these rules, and does not immediately report same, shall be subject to a fine or to the conditions laid down in this article. Members must report to business agent or executive board or local union, either verbally or in writing.

Article 13. No bicycle shall be ridden during the working hours herein specified.

Article 14. Under no conditions will members of this Local work in any shop employing an apprentice.

Article 15. Members finding it necessary to call at shops on any business relating to their work shall do so during the regular working hours.

Article 16. Plumbers and gas fitters foreign to this city will be permitted to work, or admitted to membership in this Local as first-class journeymen only.

Article 17. Any member when advised to leave a job by the business agent of his union, shall do so, and shall not return to work on such job until advised to do so by the business agent, or this union.

Article 18. No member shall work in any shop where more than one master plumber handles tools, and said master to be designated as the one who is to handle the tools.

Article 19. Any member refusing to show check to any member of this organization when requested shall be subjected to a fine. Whenever suspicion is aroused executive board or union to appoint a man to investigate.

Article 20. The business agent shall present at each meeting a detailed report covering his movements for each day since the previous meeting.

Article 21.—No member of this organization shall, either directly or indirectly, in any manner solicit votes looking towards his election to any office or privilege (including the position of delegate to conventions) within the gift of this association. A violation of this act will render the beneficiary of such offense ineligible to election.

Article 22. In shops where there are three or more plumbers employed a gas fitter shall be employed to do all gas fitting coming into that shop.

Article 23. All plumbing and gas fitting done by members of this Local shall be done strictly according to the plumbing ordinance of the city of.....

Article 24. Under no conditions shall a member of this Local start or construct any special permit plumbing work without first notifying the business agent of this union.

Boots and Shoes in India.

There has been a steady increase in the importation of boots and shoes into Calcutta during the last few years the Belgian Consul at Calcutta reports. In the fiscal year 1900-1, 324,798 pairs were introduced (value 855,349 rupees); in 1901-2, 276,939 pairs (value 756,168 rupees); in 1902-3, 337,858 pairs (value 901,318 rupees); in 1903-4, 359,918 pairs (value 956,386 rupees), and in 1904-5, 499,993 pairs (value 1,286,549 rupees). As regards the medium and better-class goods the trade is practically controlled by the English manufacturers, and the greater part of the imports last year was of British origin, although Austria-Hungary, the United States, Germany, and Switzerland also contribute. Belgian goods are practically unknown in Bengal. It is difficult to form a correct idea of the value of local production; in Calcutta there are quite a number of Chinese shoemakers whose goods find a sale even amongst the Europeans. The import trade in this article is done almost entirely by native firms; what few European houses are in the trade act only as middlemen between the makers and the retailers at the bazaars.

EXCISE DUTY ON ALCOHOL.

Following is an extract from the Inland Revenue Act of Canada, showing the duties of excise charged on alcohol. The minimum tax is $1.30 per gallon of proof spirits. When it is considered that without the tax alcohol could be sold for about fifteen cents a gallon, it will be recognized at once how burdensome the tax actually is. The section of the Act reads as follows:—

130. There shall be imposed, levied and collected on all spirits distilled, the following duties of excise, which shall be paid to the collector of Inland Revenue, as herein provided, that is to say:—

(*a*) When the material used in the manufacture thereof consists of not less than ninety per cent. by weight, of raw or unmalted grain—on every gallon of the strength of proof by Sikes' hydrometer, and so in proportion for any greater or less strength than the strength of proof, and for any less quantity that a gallon, one dollar and thirty cents;

(*b*) When manufactured exclusively from malted barley, taken to the distillery in bond and on which no duty of customs or excise has been paid—on every gallon of the strength of proof by Sikes' hydrometer, and so in proportion for any greater or less strength, and for any less quantity than a gallon, one dollar and thirty-two cents;

(*c*) When manufactured exclusively from molasses, syrup, sugar or other saccharine matter, taken to the distillery in bond and on which no duty of customs has been paid—on every gallon of the strength of proof by Sikes' hydrometer, and so in proportion for any greater or less strength, and for any less quantity than a gallon, one dollar and thirty-three cents.

Should Study Newfoundland Market.

A perusal of the Customs Returns of Newfoundland for the year ended 30th June, 1905, reveals the fact that there are still several items on the list of imports, in which Canada does not figure as prominently as it should, and might do, if Canadian exporters gave a little more attention to the requirements of this market, writes Mr. E. D. Arnaud, Canada's Commercial Agent to Newfoundland.

"While it is quite true that the imports from Canada have doubled in volume during a period in which those from Great Britain have remained about stationary, and goods from the United States have fallen off 50 per cent., which is a very satisfactory position from the Canadian standpoint, there seems to be no good reason why it should not be still further improved upon, and in order to draw attention to the matter, I append a list which will show the relative position of Canada in the volume of these imports, and which seems to be worthy of some consideration.

I am given to understand that it is mainly a question of price and quality of goods offered, and that if Canadian exporters can do at least as well as their competitors abroad in these respects, they will have very little difficulty in still further increasing their sales in this colony.

In recent years there has been such an improvement in the means of transportation by railway and coastal steamers, as well as in direct communication with Canadian ports, that the reason why trade was so largely directed into other channels, has disappeared to a considerable extent, and at the present time every facility is given by the granting of through bills of lading by the Reid Newfoundland system to reach the most distant outports of the colony."

Steel Rail Quality.

Bessemer steel rails last very much longer than the iron rails which they replaced, but still better quality has of late been demanded, as railroad engineers naturally want the best they can get. Besides this there is the fact that individual loads are much heavier and there are more of them per unit of time.

Owing to the improvement in rolling operations the rails get through the last pass sooner than formerly, so that they finish at a higher temperature, and with the increased amount of metal put in the head there is a further tendency for the rail to finish at a high temperature.

The higher the temperature at which steel is allowed to cool undisturbed the larger will be the grains or crystals, and therefore the weaker the steel. In the latter part of 1900 one of the standard rail mills, the Edgar Thomson, was remodelled to permit of holding the rail before the last pass for such a length of time, that it would be finished at the proper temperature. The finishing rolls were set forward 56 feet, and an intermediate cooling table inserted where rails are allowed to accumulate, there being say half a dozen rails on the table at a time, each remaining about a minute. The head of one touches the flange of the next, whereby the two portions cool about equally. This process was devised by Julian Kennedy and Thomas Morrison.

Railroad engineers are looking more and more towards the open-hearth rail as furnishing further improvements. The open-hearth process produces a more trustworthy material, and permits of a reduction in phosphorus. With the Lake Superior Ores available it is impracticable to attempt to make any large quantity of Bessemer steel much under the regular limit of 0.10 per cent phosphorus, while the basic open-hearth steel process can go much lower. Not only does phosphorus increase the liability to breakage under shock, but it promotes coarse crystallization, so that lower phosphorus means finer physical structure with the same finishing temperature.—"The Industrial World."

Represent Manufacturers in the West.

A Western dealer, with travellers covering Western Canada, is prepared to represent some Eastern manufacturers of hardware lines for that territory. The lines now carried, building papers and roofings, bring his travellers into contact with all hardware merchants. He will be East during August, and will discuss the matter with manufacturers at that time. Correspondence addressed Hardware, care of "Industrial Canada," Toronto, will be forwarded.

Position Wanted.

Manager, now in full charge of most extensive works of kind in Canada, desires for family reasons to transfer services to equally responsible position with manufacturing firm near a centre of population. Advertiser was trained as mechanical engineer, has successfully held various important positions, is accustomed to handling men and transacting business on large scale and could organize new works. Highest references. Salary no object.

Energetic,
c/o Industrial Canada, Toronto.

The area of British Columbia, including lakes and rivers as well as the land, is 395,000 square miles, which is greater than that of any other province of the Dominion. Quebec comes closest with a total area of 351,873 square miles; and Ontario has but 260,862.

DIFFICULTIES IN DEVELOPING AUSTRALIAN TRADE.

Mr. J. S. Larke, Canadian Commercial Agent to Australia, recently wrote a letter on the difficulties in developing Canadian-Australian trade, which is worthy of close attention by all manufacturers who are trying to establish a trade with that country:—

I have this day received a letter from one of the most active promoters in the introduction of Canadian goods into this market, of which the following sentences are the important parts:—

I beg to intimate to you that I have determined to relinquish importing Canadian goods.

There is no need for me to recapitulate reasons which have led to this course as some of them are as well-known to you as to myself.

The reasons which have led him to come to this conclusion may be summarized in five items which I give from his statements, as they illustrate some of the difficulties that lie in the development of the Canadian export trade with Australia. The gentleman went to Canada and made arrangements with a number of manufacturers to represent them, with the results as itemized below:—

(a) He took up a line of goods which were prejudiced in this market through the introduction of a quantity which were defective by a New York firm which had purchased them as defective. By persistence he succeeded in introducing them in all the states and in New Zealand, though hampered by the inability to get a full line of the goods. The Canadian business is owned abroad and the foreign owners are represented here by a large house, which has now demanded that the whole of the production of the company, Canadian and otherwise, shall be put into its hands. It had sufficient influence to have this done and the agent of the Canadian factory has received notice that his agency will cease. This deprives him of a considerable revenue, the result of some seven or eight years application. The Canadian manager regrets the change and has treated the agent honorably by giving him some compensation.

(b) A line of goods which he introduced to some extent were defective in construction and in the methods of shipment. He suggested the changes and the changes were made, but unfortunately the Canadian house transferred the agency to another firm with the result that it has never received an order since for its goods from Australia.

(c) He has sold the goods of two manufacturers to a limited extent, but has never been able to secure a price for these goods delivered f.o.b New York, though he has occasionally received the rates of freight prevailing from the Canadian factory to New York. This did not cover the requirements and he was never able to quote these goods satisfactorily to wholesale houses and thus get them to try them.

(d) He had arranged with several firms for whom he made enquiries, obtained information and the correspondence seemed to indicate that the Canadian manufacturers were going to use efforts to push their business here. In one case, after he had done this he received a reply that the home orders were increasing and the firm had concluded not to attempt an export business just yet. In a second case he received information that they were unable to go any further, as they had been negotiating for some time with another firm in Australia and could do nothing until a conclusion had been reached in such negotiations. In both of these cases the firms were branches in Canada, but owned abroad and the possibility is that the branches had been stopped in their proposition to do an export trade from Canada. In the case of two others the correspondence suddenly ceased without a word of explanation.

(e) These disappointments, together with slowness in filling orders and in replying to correspondence are the reasons which he has given for abandoning Canadian trade.

Comments.

In the case of (a) it is possible that it might not affect the Canadian export trade. The fact of having a full line places the new agents in a better position to do business than before, provided that the manufacture of a portion of the lines is not removed from Canada, but in the case of (a) and (b) the disappointment of doing business with factories owned outside of Canada makes it additionally difficult to get agents here to take up Canadian business, for unfortunately this is not the only instance in which negotiations for such business has been suddenly frustrated, after the Australian house had made some sacrifice in order to take up the lines in lieu of others that they had handled.

In the other cases it would seem as if Canadian manufacturers had not seriously considered the question of export trade, but are ready for the moment to listen to a proposition which they forget immediately afterwards or, where they carry out an arrangement, it is done in such an imperfect way as to prevent the success of the effort, to the detriment of Canadian business reputation. No one can complain if Canadian manufacturers, pressed by home orders, should refuse to entertain a proposition to do a trade in this country, but when such a proposition is made they should give it careful consideration and determine whether they are willing to comply with the conditions in respect to securing information and supplying it, as to freight, packing, shipment, as well as price of goods and to supply orders with reasonable promptness if secured, before they give agents to understand that they will take up the business. A commission agent obtains his living as the result of trade done. When a manufacturer gives him to understand that he will give him his agency the commission man ceases any effort to secure similar lines from another manufacturer. The failure of the Canadian agreement therefor entails upon him the loss of months of time and perhaps has prevented him from securing the agency of another house that would have been financially successful. It is quite easy to understand, therefore, why the agent or firm in good standing in business circles here now hesitates to touch Canadian lines.

My recent visit to a number of manufacturing centres of Canada shows that there could be a considerable surplus of goods made for export, provided that there were economical arrangements made for selling them in this market. The factories as a rule either have not sufficient surplus to warrant them in doing a trade on their own account or else are not financially able to do so, but could supply goods direct to a company which would buy them and handle them in this market. There is a company which is doing something in this direction in New Zealand, comparatively less in Southern Australia, but it has only made a feeble effort as yet in this state and in Queensland, where more than half of the Canadian goods are sold. Why this is so I am unable to state, but at all events the conditions which would extend the Canadian trade here, keep Canadian factories in fuller work and working men in steadier employment, have not as yet been fulfilled.

POLITICAL ECONOMY IN BUSINESS.

Perhaps the most widely read text book on Political Economy among American college students to-day is Professor Gide's "Principles of Political Economy," the second translation of which from the 8th French edition is issued by Heath & Co. The book is written in a lucid style, and appeals to business men as well, on whose bookshelves it might readily find a place alongside of their Adam Smith and their John Stewart Mill, which, in spite of all competitors, never grow old.

Business men frequently disdain college books as being academic and unpractical. To a considerable extent they are right, for no text book or treatise on principles can be a practical treatise like a medical manual or a Mrs. Beeton's cook book, full of nostrums and recipes. It can only offer a discussion of principles with perhaps some typical applications. Even then it is unfortunate for theory that the applications can never be entirely identical with conditions, for, like history, conditions often fail to repeat themselves, and the applications of to-day are no immutable guides for to-morrow. Theory, too, in every-day affairs cuts often a sorry figure simply because some raw recruit fires it off at half-cock.

It is these facts that go to explain the readily-flung cries of theoretical and academic. But theory is well in its place; it is as indispensible as practice. Theory is the idea or the basis of the idea; practice is the result. And after all is said and done the world owes a great deal to theory, perhaps more than most of us have any adequate conception of; and the best practical man is the man who is thoroughly familiar with actual conditions, and also with the theory of those conditions.

On a little reflection, these statements are obvious enough. We use them here to emphasize the importance to business men of such works as Professor Gide's Political Economy. Never before has the labor problem been so universally prominent and delicate, never before have banking and credit assumed such tremendous importance, never before have taxation and customs tariffs, and combines of all kinds, and social problems loomed larger. If ever a thoughtful study of the theory of society and wealth was called for, that call is heard to-day.

S. M. W.

THE CANADIAN ANNUAL REVIEW.

For handy reference on Canadian affairs the official *Statistical Year Book*, and *The Canadian Annual Review*, edited by Mr. J. Castell Hopkins, are almost essential. In the "Annual Review," one finds almost everything of public interest from political events and speeches of M.P.'s and M.P.P.'s to important commercial, literary, and local happenings. It includes also a most useful statistical section. The infinite variety of the volume is rounded off with a complete contents and an alphabetical index. Canada is fast making history for herself, so particularly now the work of the diligent editor deserves to be rewarded by a wide circle of readers. We venture to suggest, though, that the editor should not allow the volume to grow further in bulk. As it is the 600 odd pages might even now be cooked down to not more than 500, which may be considered a liberal maximum for any Annual Review.

CANADIANS IN THE UNITED STATES.

Many of our people have migrated to the United States during the last half century. The number, with interesting information about their mode of life and occupations after going there, is entertainingly told by Mr. S. M. Wickett in an article in the "Political Science Quarterly," a reprint of which has just been issued. The writer discusses the causes of these movements of populations. They have been a feature of every century's progress. They are, on the whole, explainable by the statement that "migration is the attempt to adjust population to opportunity—a process of adaptation, a phase of industrialism."

Some of the figures compiled by Mr. Wickett are truly startling. For instance, few have any idea that in 1900 there were 1,181,255 Canadian-born people resident in the United States. On the estimated cost to the country of $1,000 for each one, our investment in the United States for these alone is $1,650,000,000. Strange to say, the majority of Canadian emigrants have not gone to the cities. Over half have gone on farms or are settled in the smaller towns. The distribution over the United States is shown pictorially by two shaded maps, supplemented by lists showing the number of Canadian-born people in the various States and cities of the Union.

Most interesting is the account of the occupations pursued by Canadians across the line. Their general success is explained by the writer on a number of grounds, first in the list of which is that "those who seek their fortune in a foreign country are presumably hardy and ambitious, the result of a process of natural selection."

Finally, Mr. Wickett refers to the intermingling of population between the two countries as a pledge of peace. This is strengthened by the fact that the two nations practically divide the continent, and that both countries are finding responsibilities beyond their own limits.

BOOKLETS AND CATALOGUES.

The McIntosh Brick Machine Company, Limited, of Goderich, have issued two booklets illustrating their machine and the work it accomplishes. The treatment in both cases is very convincing and should help to popularize sand-cement pressed-brick.

Section 6 of the Canadian General Electric Company's supply catalogue is devoted to sockets and receptacles. A great variety is shown and the excellent cuts with accompanying price list make the purchase of such articles easy.

The Brantford Screw Company, Limited, have issued a catalogue of their goods. The design and printing are both exceptionally good. The marginal index makes it possible to refer to any class of goods in a moment. It is a convenient book of reference.

"The Last West" is the title of a booklet which the Edmonton Board of Trade recently issued. It shows one phase of the activity which is everywhere prevalent in Canada. The spirit of the West is admirably expressed in this book. The wealth-producing grain lands of Alberta, the confidence of the citizens as shown by the substantial and ornate buildings which are being erected, and the general prosperity of the city are illustrated in its pages. The Edmonton Board is doing good work in making the advantages of the West known to the rest of Canada.

INTERNATIONAL POSTAL RATE.

The position of the metric system controversy in England is shown to some extent by the following correspondence. It will be seen from this that in international postal matters Canada gains the advantage which comes to all non-metric countries, though the acceptance of the ounce as the equivalent of the 20-gramme unit.

British Weights and Measures Association.
25 Victoria St., London, S.W.

Dear Sir,—In reference to your enquiry of weight for international letters, I give you on the opposite page copy of a letter I have received from the General Post-Office on the subject.

Three points are brought out by this letter:—

(1) Seeing that the ounce is equal to 28.34 grammes, anti-metric countries get an advantage of 40 per cent. over pro-metric countries.

(2) The Post-Office, after the years of experience they have had since the 15-gramme weight was made the international unit, have found it more advantageous to use a British weight, and have now secured its adoption and international recognition.

(3) The Government, through the General Post-Office, confers a benefit on the public by securing the elimination of metric weights from the only Government Department in which they have been tried.

This practical step of the present Government to defend, standardize and simplify British Weights and Measures, should be energetically followed up with the view of removing confusion by eliminating metric weights and measures from any use to which they may have been put in this country. Nor should it be overlooked that the valuable work now being done by the Engineering Standards Committee is based upon the British inch, and that it has Government recognition and financial support.

British weights and measures, with a very small re-arrangement, can be made more perfect for scientific uses than is the metric system, without destroying their world-wide use for manufacturing purposes.

Yours faithfully,

(Signed) GEO. MOORES, Secretary.

General Post-Office, London,
8th June, 1906.

Sir,—In reply to your letter of the 25th ultimo, I am directed by the Postmaster-General to acquaint you that at the Postal Union Congress which has just concluded its sittings in Rome, the unit of weight for international letters was raised from 15 grammes to 20 grammes. It was moreover decided that in countries such as the United Kingdom, where the decimal-metric system of weights and measures is not in force, 1 ounce avoirdupois should be the equivalent of 20 grammes.

The decisions of the Rome Congress will not take effect until the 1st of October, 1907.

I am, Sir,

Your obedient servant,

(Signed) ARTHUR G. SHAND,
For the Secretary.

Geo. Moores, Esq., F.S.S., Secretary,
British Weights and Measures Association.

FORM TO ACCOMPANY EXPORTS TO JAPAN.

Sub-joined is a copy of the form which must be filled out by Canadian manufacturers in order to receive the benefit of the minimum rate of duty from Japan under the most favored nation clause. A copy of this may be had from the Imperial Consulate General of Japan, Mr. T. Nosse, Ottawa, upon remitting five cents with application. It is essential that the information under the various heads be exact.

Declaration and Oath as to Canadian Products or Manufactures Exported to Japan.

Marks.	Numbers.	No. of Packages.	Description of Articles.	Quantities or Weights	Place of Production or Manufacture	Place of Shipment.	Date of Shipment.

DOMINION OF CANADA
PROVINCE OF
COUNTY OF } SS:
CITY OF

I, ... do solemnly, sincerely and truly swear that I am * ..... of ..... office at ..... City of ..... Province of ..... Canada † ..... of the above described articles, consigned to ..... & Co. of ..... Japan, per S.S. ..... to leave the port of ..... Province of ..... on or about ..... 190 , that all the said articles are respectively, truly and bona fide the ‡ ..... in each case of the place above mentioned in the Dominion of Canada and that in all other respects the foregoing statement as to said articles is true to the best of my knowledge and belief.

Sworn to before me
this ..... day of 190
[L.S.] .....
Notary Public or J.P.

.....
(Signature of persons making the Declaration.)

City or Town of ..... Province of .....

* Insert here "partner" or "manager," etc., according to the fact.
† Insert here "shippers," "owners" or "manufacturers," etc., according to the fact.
‡ Insert here "products" or "manufactures," according to the fact.

AMONG THE INDUSTRIES

The Canada Paint Co. will erect a warehouse in Winnipeg.

Coppley, Noyles and Randall, of Hamilton, are building a new warehouse.

Line, McDonald & Co., cigar manufacturers, of London, contemplate erecting a new building in that city.

The Frobisher Foundry Co., of Frobisher, Sask., have their plant completed and commenced work during the month.

The name of the Power & Gas Machine Co., Limited, of Galt, has been changed to the Canadian McVicker Engine Co., of Galt.

Incorporation is announced of the McGlashan-Clarke Co., Limited, cutlery manufacturers, Niagara Falls. The capital is fixed at $100,000.

The Canadian Axminster Co., Limited, has been incorporated with a capital of $50,000. The factory and head offices will be located in Hamilton.

The Peterborough Sandstone Brick Co.'s plant is now completed, and is turning out 20,000 bricks a day. This is the full capacity of the factory.

The Canadian Seamless Wire Co. Limited, of Toronto, have installed a plant for the production of seamless tubing in brass, copper, and nickel-silver.

The large amount of business being done by the Hamilton Bridge Works has made it necessary for the company to consider enlarging their works.

The plant of the Hamilton Brass Works, Hamilton, Ont., was injured by fire during the past month. The moulding shop in the rear of the main building suffered most.

The factory in Stratford, owned by the Massey-Harris Co., which has been closed since the company transferred their plant to Toronto, will be re-opened this fall. The Massey-Harris Co. will manufacture binder twine in it.

Plans have been prepared for a new factory for the Smart Bag Company, Limited, of Montreal. The building will consist of three storeys and a basement. The company are also trebling the capacity of their Winnipeg factory.

The Simpson Brick Company, Toronto, have bought out the Aberdeen Brick Company's plant in Hamilton. It is the intention to increase the capacity from 7,000,000 to 12,000,000 bricks a year.

A controlling interest in the Penman Manufacturing Co., of Paris, is reported to have been bought by a German financial house. The local holders of stock realized a good figure on their shares.

Simplex Railway Appliance Co., Limited, Montreal, expect to have their new steel car works completed about September 1st, when they will be in a position to employ 350 skilled mechanics.

The ratepayers of Port Hope have voted to exempt the Central Foundry Company from taxes. This is a new concern, financed by American capital. Within the first year it will pay out in wages at least $25,000.

Contracts have been let to the Northern Construction Co., Limited, of Winnipeg, for the erection of ten to fifteen modern grain elevators throughout the West. It is expected that they will be ready for this year's crop.

A company backed by Sir Thomas Lipton is considering the establishment of a large packing plant in Western Canada, with a view to capturing the British meat trade. Sir Thomas formerly owned a packing house in Chicago.

The Mill of the International Talc Company at Hillsboro, Ont., was destroyed by fire on July 8th. The mill was one of the largest producers of talc in the world. The loss is over $150,000, with insurance covering half this amount.

The Cudahy Packing Company, of Chicago, have been licensed by the Ontario Government to do business in Ontario. The capital of this end of the business is set at $40,000. It is reported that the plant will be erected at Toronto Junction.

The Hamilton Steel and Iron Company have decided to build another furnace at a cost of $250,000. The furnace will be completed in 1907, and by a special arrangement with the city the company's assessment will be fixed after 1908 at $300,000.

The Canadian McVicker Engine Company, Limited, of Galt, will manufacture gas and gasoline engines. They hold the patents of the Alma Manufacturing Company, of Alma, Michigan, and will manufacture a full line of their products.

The mill of the Manitoba Gypsum Co., of Gypsumville, Man., was destroyed by fire during the past month. The mill had been in operation about three years, and was doing an extensive business. A new building will be erected at once.

Incorporation has been granted to the Supreme Heating Co. with a capital of $200,000. The company will manufacture stoves with a device for causing more complete combustion. They will erect a plant either in Owen Sound or Toronto Junction.

Desbarats & Co., have issued a notice that owing to a fire they have opened a temporary office at 119 Craig St. West. Their new building on Beaver Hall and Lagauchetiere Street is well under way, and they expect to have a new plant installed there within a few weeks.

The Canadian Shipbuilding Company have purchased a block of land on the Niagara River near Bridgeburg, and are applying to the Ontario Government for rights on the river bank. They will establish a blast furnace and other works, in addition to the shipbuilding yards.

Montreal and Ottawa capitalists have purchased the plant of the Ottawa Furnace and Foundry Company, Ottawa, Ont., for $47,500. This plant was closed about six months ago, and its re-opening will mean the employment of over 100 men. It is the intention of the new owners to commence operations within a month.

A vigorous effort is being made in London to secure the Canadian branch of the Crandall Cutlery Company, of Bradford, Pa. The Canadian Cutlery Co., as the Canadian branch is to be known by, have been negotiating for some time, and a definite proposal has been formulated by the city council and it is expected that the arrangements will prove satisfactory.

A company has been formed to supply Chatham with natural gas. The annual amount of manufactured gas used in that city is about 24,000,000 cubic feet. The Tilbury field gives evidence of enormous quantities of the natural product, and it is intended to pipe it to Chatham. A local company, called the Chatham Gas and Oil Company, are carrying out the project.

The Canadian Northern Railway has placed orders for five hundred and fifty box cars, with Rhodes, Curry & Co., Amherst, N.S., The Canada Car Co., Montreal, and the Crossin Car Co., Cobourg. These cars, in addition to the sixteen hundred cars ordered earlier in the season, and fifty locomotives, for this season's delivery, represent an expenditure of four million dollars.

The Central Foundry Company have been granted exemption from taxes by the town of Port Hope. This is a new company, with a capital of $250,000, and under the agreement a large number of men will be employed. During the first year at least $25,000 will be paid out in wages. The company will rent buildings from the town, and will spend several thousands of dollars in improvements.

The Savonas Land & Lumber Company has been incorporated in British Columbia as an extra-provincial company, with a capital of $240,000. It is understood that the company intend utilizing the water-power now going to waste between the outlet of Kamloops Lake at Savona and the Horseshoe Bend for the generation of electricity. Power will be transmitted to Kamloops and intermediate customers who may desire power or light.

Two companies are negotiating for the erection of smelters in Northern Ontario. The Montreal Reduction and Smelting Company have bought a site at North Bay, and have applied to the Toronto and Northern Ontario Railway Commission for sidings. The other company are considering the erection of a smelter at Cobalt. The latter company have had experience in smelting arsenical and silver ores, and they consider Cobalt as a good field for operations.

TRADE ENQUIRIES.

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by number to the Secretary, at Toronto.

437 **Agencies.**—A firm of general commission agents in **Hamburg, Germany,** established 1865, desire to represent a good Canadian house exporting grain, flour, seeds, etc., to sell direct to purchasers against draft. Consignments of leather, hides, skins, raw furs, tallow, beeswax, castoreum and seneca also solicited.

438 A correspondent in **Vancouver, B.C.,** who claims to have an intimate knowledge of every town in the Province, and able to furnish the best of references, is prepared to take up the representation of Eastern Canadian manufacturers.

439 A **Manchester, England,** firm of engineers wishes to act as agents in England for Canadian manufacturers of machine tools, engines, and electrical machinery.

440 **Asbestos (Raw),**—A correspondent in **Durban, South Africa,** would like to hear from Canadian exporters of raw asbestos, such as is used in the production of asbestos packing and asbestos slate.

441 **Boxboards,**—A **Manchester, England,** firm with extensive connection throughout England, wishes to obtain large supplies of boxboards from Canadian manufacturers, and will welcome correspondence in relation thereto.

442 **Butter.**—A large **South African** firm of cold storage merchants desires quotations from Canadian shippers of high grade butter.

443 **Carbide of Calcium.**—Inquiry has been made by a **Scottish** firm of names and addresses of Canadian manufacturers and exporters of carbide of calcium.

444 **Chair Legs.**—A **Lancashire, England,** firm at present obtaining supplies from the continent asks for samples and prices c.i.f., Manchester, of chair legs and spindles from Canadian manufacturers.

445 **Cow Hair.**—A large **British** firm, manufacturers of hair felt, etc., invite correspondence with Canadian tanneries and others able to export them large quantities of cow-hair in regular shipments.

446 **Eggs.**—Enquiry is made by a commission house in **Kimberley, South Africa,** for a Canadian firm prepared to ship 2,500 dozen eggs every month. Quotations f.o.b. nearest port. Terms, cash against draft with B. L. attached. A bank reference is supplied.

447 **Flour.**—A well-known **New York** export house would be glad to hear from some Canadian flour millers, upon whom they could rely for a good quality of flour for export to South Africa.

448 **Flour.**—A **Cardiff, Wales,** firm is desirous of getting in touch with a first-class flour milling company in Canada, who can supply a good lower grade flour at a moderate price.

449 **Handles.**—A manufacturer of pressed steel tools in **Western Ontario** is open to purchase D. handles, X and XX, 1⅝ inches thick; also long handles.

450 **Handles and Handle Stock.**—A wood turner and bender in **Stourbridge, England,** is prepared to buy small quantities of ash squares, 12″ x 1″ x 1″, 12½″ x 1 1-16″ x 1 1-16″, and 13″ x 1 1-8″ x 1 1-8″; also sledge and hammer handles.

451 **Handles.**—A **Birmingham, England,** firm wishes to hear from a Canadian shipper of handles. Can take large quantities.

452 **Hay.**—A **Yorkshire, England,** firm requiring large quantities of hay invites correspondence with Canadian sellers.

453 **Hay.**—A **Leeds, England,** firm of forage contractors, handling large quantities of hay, invites correspondence with Canadian shippers; c.i.f., Leeds or Liverpool.

454 **Hog Products.**—A wholesale commission agent in **Trieste, Austria,** established since 1866, is prepared to purchase all kinds of Canadian pork products, particularly pure lard packed in iron-bound tierces, firkins (110 lbs. net), or tubs (55 lbs. net), and fat backs, either long or short, averaging 18 to 20 lbs., 20 to 25 lbs., or 25 to 30 lbs., in cases of 600 lbs. net. Payment, cash against documents or London reimbursement.

455 **Honey.**—A **London, England,** firm is open to purchase Canadian honey for cash, and would be pleased to hear from producers.

456 **Lawn Mowers, Garden Implements, Sprayers, Watering Cans, Greenhouse Heating Apparatus.**—Enquiry is made for the above lines by an important firm in **Christiania, Norway,** who request to be supplied with illustrated catalogues.

457 **Lawn Mowers and Hardware Specialties.**—A **Hull, England,** firm invites correspondence and catalogues for lawn mowers, and general goods handled by hardware merchants.

458 **Lumber, Grain, Seed, Flour.**—A general commission merchant and importer of **Antwerp, Belgium,** wants to act as a selling agent in his country. He asks for quotations c.i.f., Antwerp, and sends as reference the Bank of Montreal.

459 **Maple (White), and Hardwood (Dark).**—An important manufacturer of billiard cues and window shades in **London, England,** is prepared to purchase white maple sticks, 5 feet long, 1½ inches square at large end, and tapering to ¾-inch at small end; also 4 feet 6 inches long, 1¼ inches square at large end, and tapering to ¾-inch at small end; 500 dozen in all. He is also a buyer of dark hardwood, 18 inches long, 1½ inches square, tapering to 1¼ inches.

460 **Match Splints.**—A correspondent in **Halifax, N.S.,** would like to be placed in touch with manufacturers of match splints in the Provinces of Ontario and Quebec.

461 **Match Splints.**—A **London, England,** firm seeks supplies of match splints, and invites correspondence, c.i.f., London and Liverpool, from Canadian manufacturers. Sticks must be round, not square.

462 **Ores.**—A firm in **Frankfort-on-Main, Germany,** wishes to get into correspondence with Canadian shippers of ores of all kinds, particularly iron and copper pyrites, galena, zinc-blende and antimony.

463 **Packing Paper.**—A firm in the **Levant** wishes to get in touch with a Canadian firm in a position to ship packing paper.

464 **Photographic Supplies.**—A party in **Durban, South Africa,** who is about to open a photographic studio, asks to be supplied with catalogues from Canadian manufacturers of plates, printing papers, backgrounds, cameras, lenses, mounts, frames, etc., also lowest trade prices.

465 **Pine.**—A **London, England,** firm wishes to enter into relations with a Canadian lumber mill in a position to ship planed and unplaned pine to South African markets.

466 **Pine Doors.**—A **Manchester, England,** firm dealing largely in pine doors wishes to obtain description and prices, c.i.f., Manchester, from Canadian manufacturers of same.

467 **Pine Squares.—A Manchester, England,** firm wants to obtain prices of pine squares for bleaching and weaving rollers, in sizes from 4 to 5 inches, and from 5¼ to 8½ inches, from Canadian manufacturers.

468 **Press.**—A **European** advertising agent claiming to have wide experience and connections, and able to supply the best of references, will undertake the sole representation of one or two sound Canadian newspapers or advertising media. Full particulars, terms, specimens, etc., are asked with the first communication.

469 **Rakes.**—A **New York** export house is prepared to contract with some reliable Canadian establishment for five or six carloads of wooden hand hay rakes, 2 bow 12 teeth, and 3 bow 14 teeth.

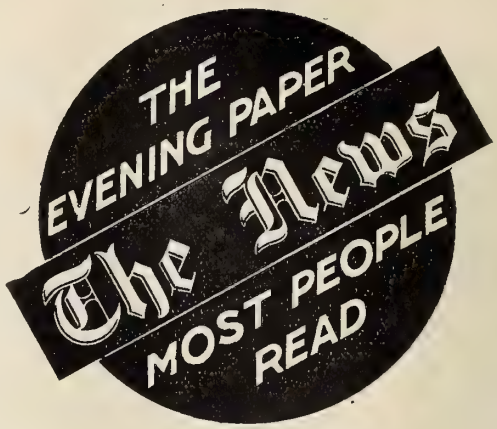
470 **Raspberry Pulp.**—A **London, England,** firm desires the addresses of Canadian shippers of raspberry pulp.

471 **Roofing Felt, Roofing and Insulating Papers and Sheathings.**—Enquiry is made for the above by a dealer in **Hamburg, Germany,** who is prepared to buy.

472 **Table Tops (for Sewing Factories).**—A large importer of sewing machines in **London, England,** is open to buy considerable quantities of bench or table tops, made of 2-inch hardwood veneer, in sizes varying from 3 to 4 feet long, by 1 foot 4 inches wide.

473 **Trucks.**—A firm in the **Midlands, England,** invites correspondence from Canadian manufacturers of trucks, especially those suitable for brewers and millers.

474 **Wood Sheets.**—A **North of England** manufacturer of interior fittings, has asked to be placed in communication with Canadian exporters of wood sheets made of thin veneers glued in many thicknesses.



Will use space in each issue of "Industrial Canada" to establish and extend its connection with

The Manufacturers

of Canada.

Of the total membership of the Manufacturers Association, there are 1,800 manufacturers whose business could be materially benefited by

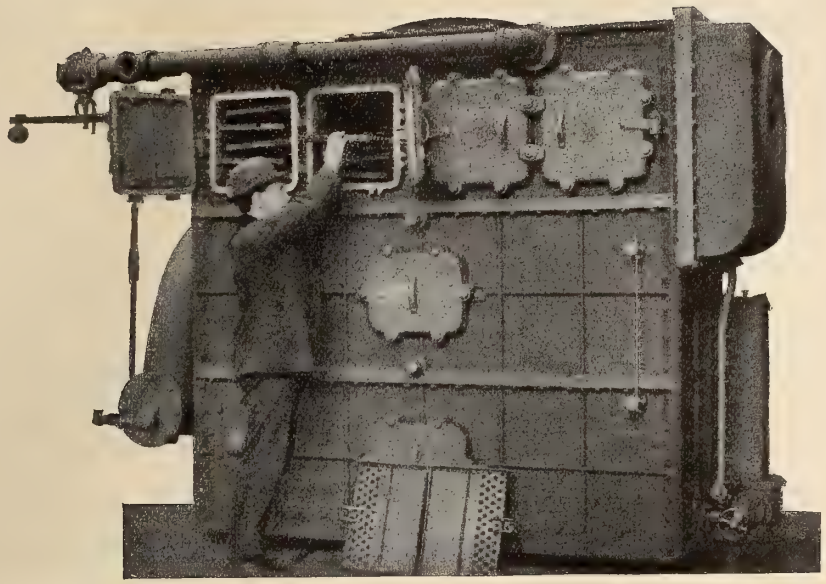
Judicious Advertising

These are the men whose attention THE NEWS wishes to engage. They may have underestimated the importance of newspaper publicity in general, or have overlooked the fact that **38,000** of Canada's **most responsible buyers** read THE NEWS daily. In fact, it is the men of standing and responsibility who compose the clientele of THE NEWS

A Natural Result—Intellectual Editorials, bright News pages, and reliable Commercial and Financial columns appeal to the right class of readers. They have the money and will to invest, given the proper incentive. Tell them about your goods through the Advertising columns of

THE NEWS
TORONTO

Cochrane Heaters



Prolong life of Boilers, Reduce Expenses, Save Time and Repairs, Eliminate Contraction Strains.

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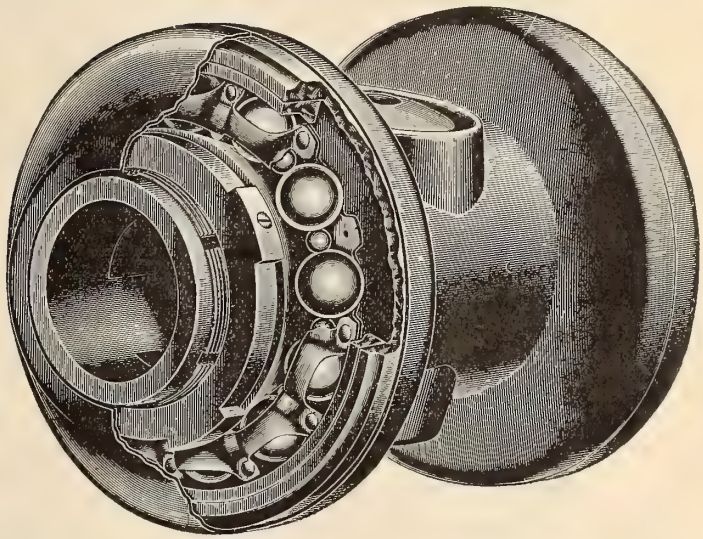
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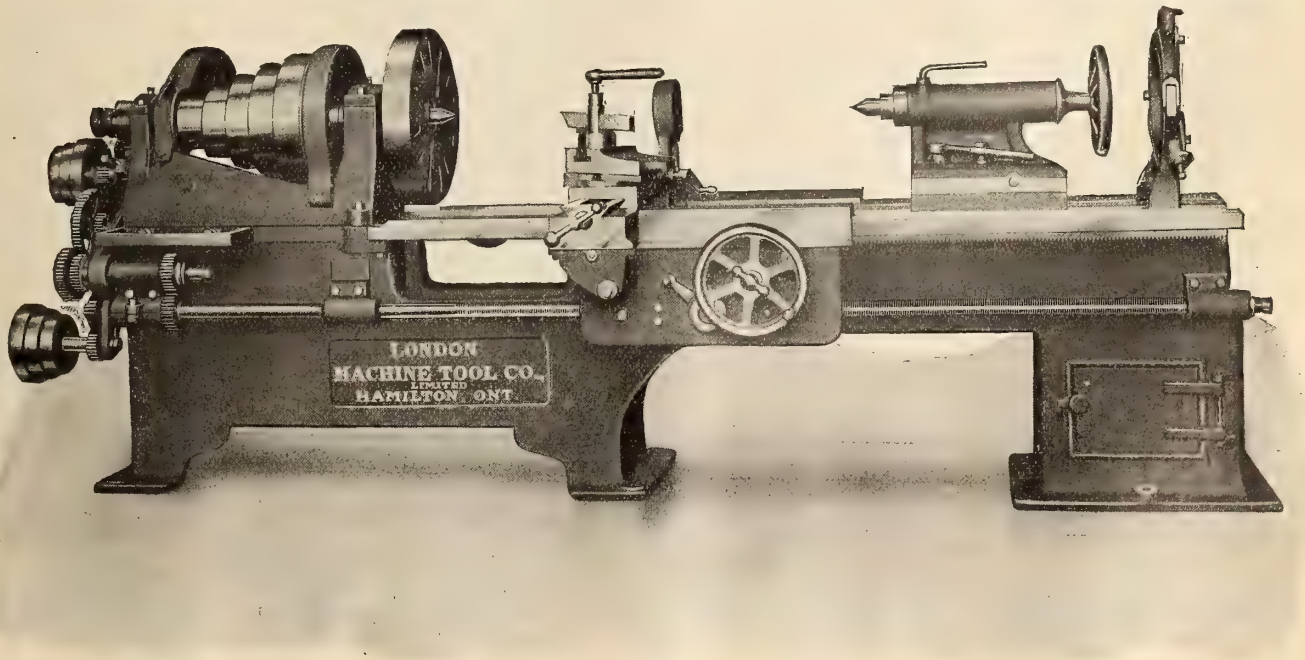


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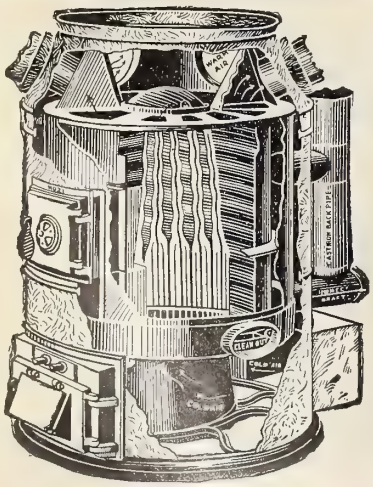
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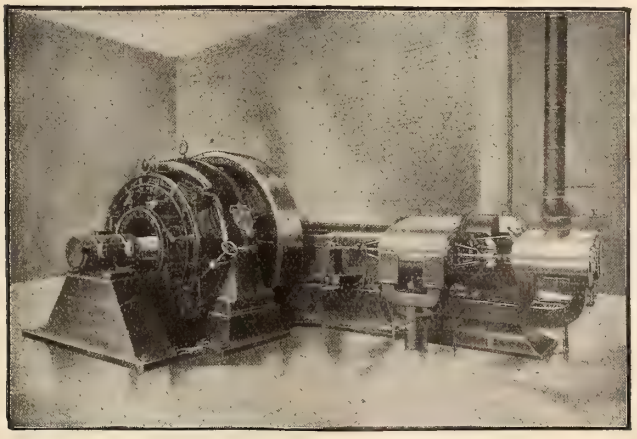
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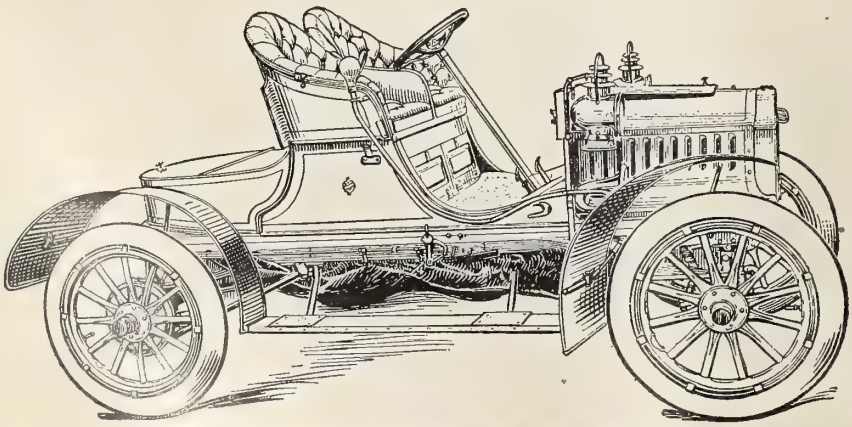
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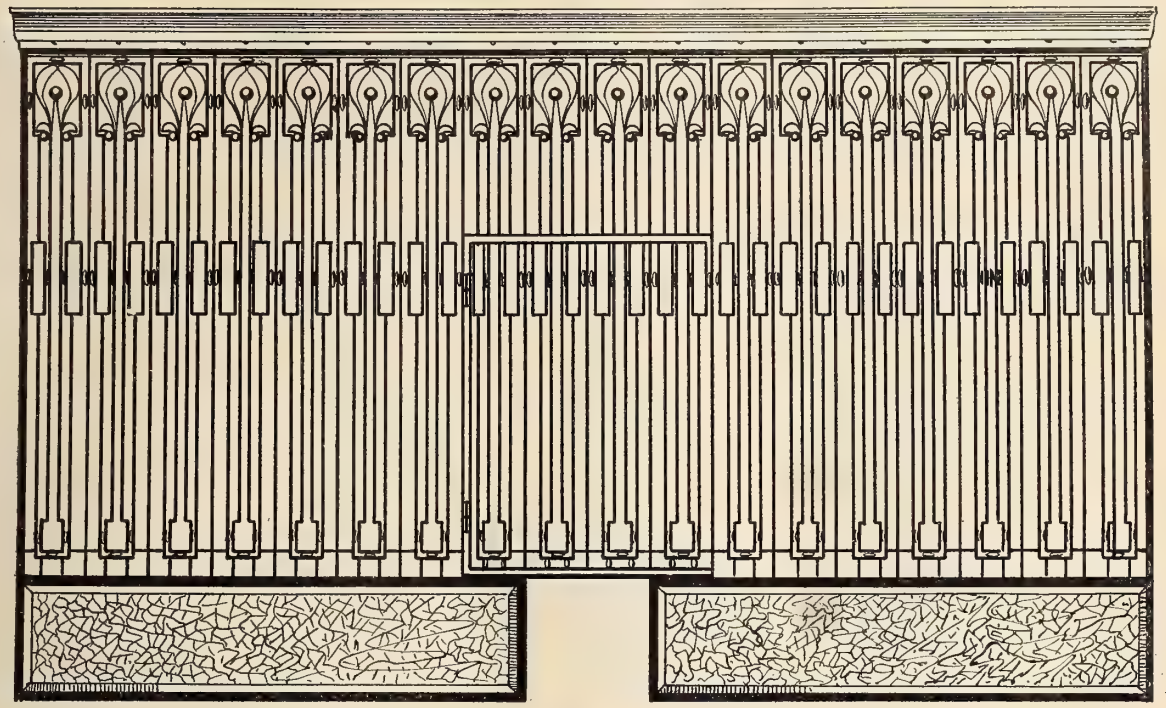
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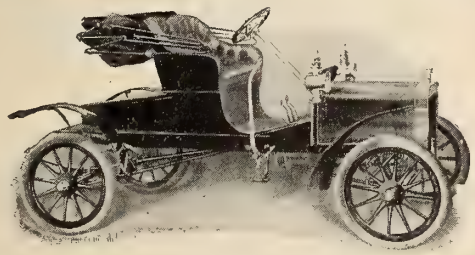
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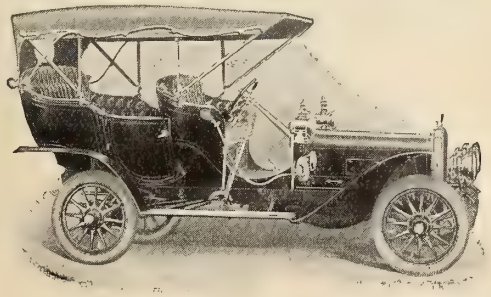


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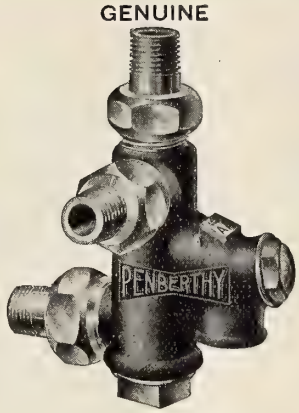
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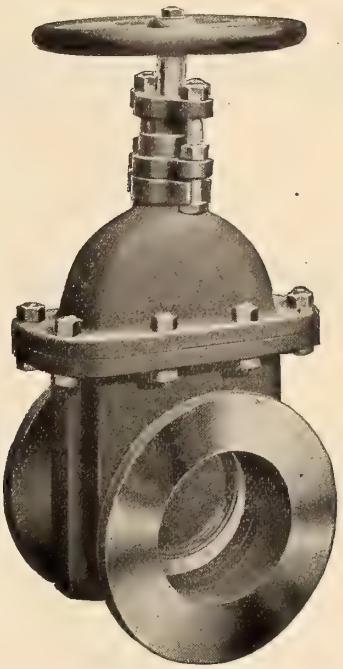
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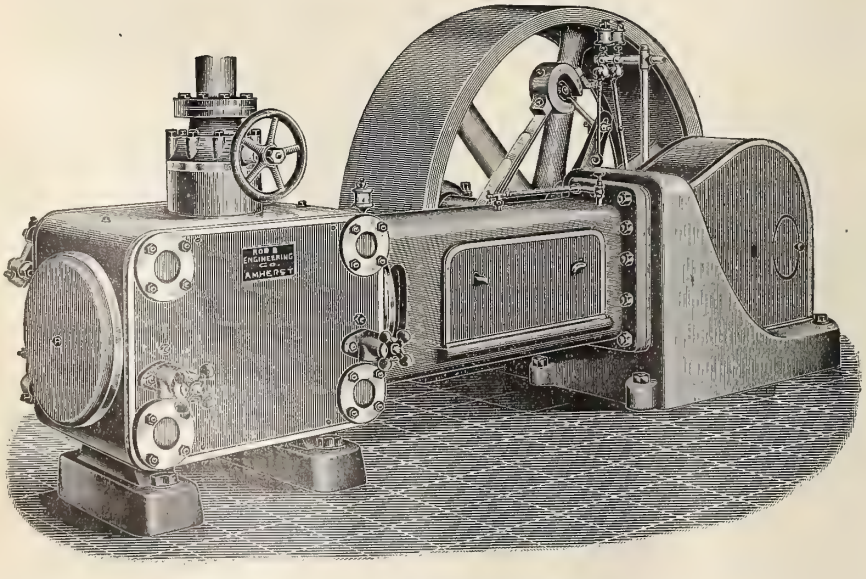
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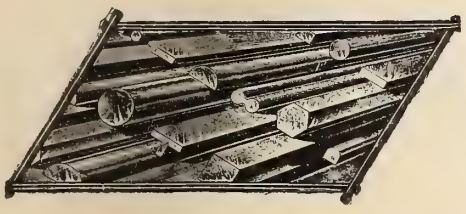
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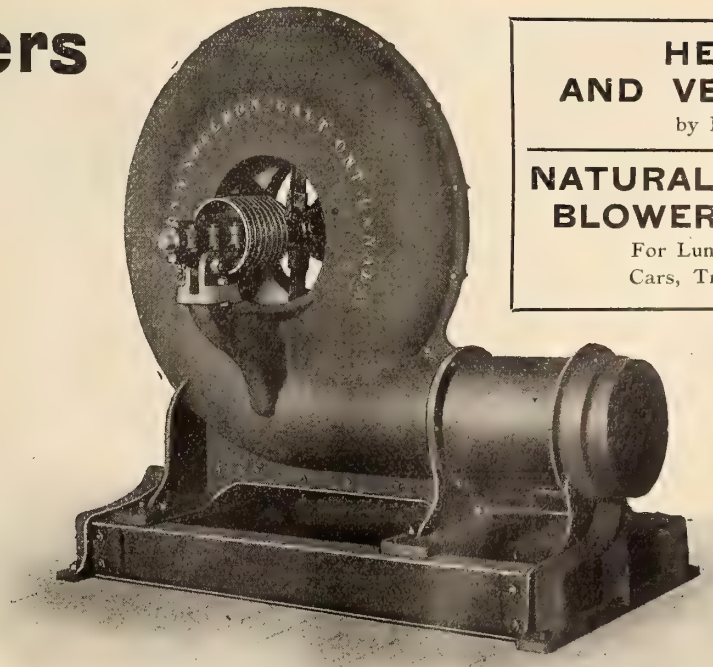
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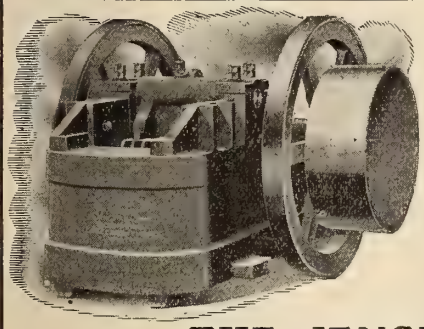
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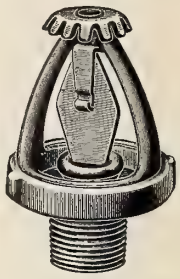
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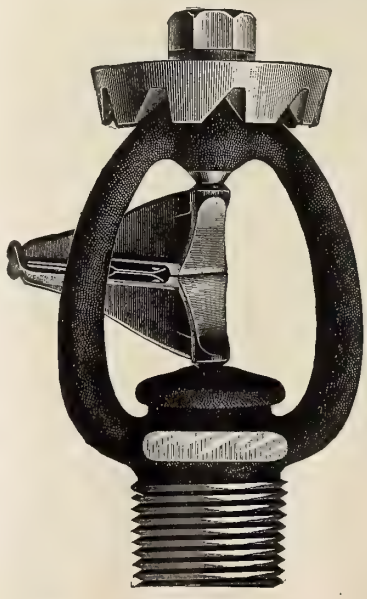
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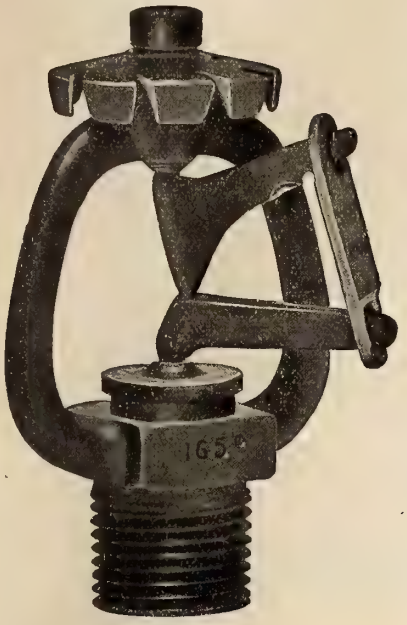
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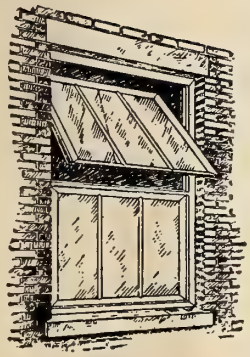
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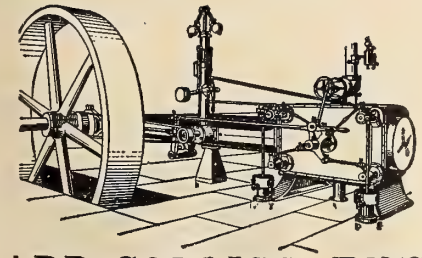
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The centre of a rich agricultural district. 2,000,000 bushels of wheat were raised last year within 20 miles of Moose Jaw. Average yield per acre of wheat in district, crop 1905, as per Government Report, 27.56 ; flax 24.03 bushels.

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City owns water works, sewerage and electric light plants, and supplies motive power for factories. The rapid settlement of the province, which is now taking place by the inflow of United States farmers, is only developing the agricultural industry, manufacturing industries must follow.

To-day no better centre for investment in Western Canada can be found than Moose Jaw for an **Abbatoir, a Tannery a Flax Mill, a Paper Mill,** and other industries.

EXECUTIVE COUNCIL

JULY MEETING.

The regular monthly meeting of the Executive Council of the Canadian Manufacturers' Association was held in the Council Chamber of the Board of Trade Building, July 19th, 1906, at 2 p.m.

Mr. H. Cockshutt, Brantford, Vice-President of the Association, was in the chair. Other members present were: Messrs. C. Bermingham, Kingston; Geo. Booth, Toronto; J. W. Cowan, Toronto; John Dick, Toronto; L. V. Dusseau, Toronto; Thos. Findley, Toronto; John Firstbrook, Toronto; H. W. Fleury, Aurora; W. M. Gartshore, London; Geo. Gillies, Toronto; S. R. Hart, Toronto; E. G. Henderson, Windsor; J. B. MacLean, Toronto; J. P. Murray, Toronto; W. C. Phillips, Toronto; Thos. Roden, Toronto; A. S. Rogers, Toronto; Alex. Saunders, Goderich; J. T. Sheridan, Toronto; J. M. Sinclair, Toronto; Wm. Stone, Toronto; H. Stroud, Paris; Geo. Sweet, Hamilton; J. M. Taylor, Guelph; J. O. Thorn, Toronto; Geo. W. Watts, Toronto; Daniel Wilson, Collingwood.

The minutes of the June meeting were taken as read.

Communications were received from members unable to be present as follows:—

(a) The President, Mr. C. C. Ballantyne and Messrs. R. Munro, Montreal; W. R. Landon, Chatham; J. J. McGill, Montreal; Geo. E. Amyot, Quebec; A. W. White, London; C. B. Smith, Montreal; John Stevely, London; Geo. D. Forbes, Hespeler; R. Hobson, Hamilton; and W. B. Tindall, Toronto.

TREASURER'S REPORT.

Mr. Geo. Booth, the Treasurer, presented a statement of the finances of the Association for the eleven months ending June 30th. He was able also to assure the Council that there would be a considerable credit balance on hand at the end of the Association year, July 31st.

The Treasurer also presented the report of the Finance Committee, which authorized the payment of accounts for the past month, and requested authority from the Council to consult the Association solicitors regarding the lease of the Association premises in the Traders Bank building. The reports were adopted.

TARIFF COMMITTEE.

In the absence of the chairman, the report of the Tariff Committee was read by the Secretary, and dealt with different matters as follows:—

Denatured Alcohol.

A number of communications from members of the Association together with different newspapers articles having reference to the Act recently passed by the United States, which provides for the withdrawal from bond, tax free, of denatured alcohol, were considered. Members of the Association interested both in the manufacture of alcohol and in its use were present and gave their views. The conclusions of the Committee are embodied in the resolution given below which is recommended to the Executive Council with the suggestion that it be passed on to the annual meeting of the Association for consideration. The resolution is as follows:—

Whereas, The United States Government have passed an Act for the withdrawal from bond, tax free, of denatured alcohol to take effect January 1st, 1907.

And Whereas, Certain European countries have enacted similar legislation;

And Whereas, Canada is particularly suited for the manufacture of both grain and wood alcohol;

Therefore, Be It Resolved, That the Canadian Government be requested to consider carefully the regulations regarding the uses and cost of denatured alcohol in foreign countries, and to so adjust Canadian regulations that Canadian industries shall not be placed at any disadvantage.

Steel Shipbuilding.

The Committee recommend that the Executive Council endorse and forward to the annual meeting the resolution passed by the Halifax Board of Trade and by the Nova Scotia Branch of the Canadian Manufacturers' Association having reference to steel shipbuilding.

The resolution is as follows:—

Whereas, This Board considers it not only desirable but essential that Canada should have well equipped ship-building yards, so that she should not be dependent upon foreign or even British builders for the maintenance of her mercantile marine;

That proof of the decadence of this industry is furnished by the fact that while the water-borne commerce of the country during the last thirty years has increased from $217,000,000 to $473,000,000 the aggregate tonnage of vessels registered in Canada during the same period has decreased from 1,158,363 tons to 672,838 tons;

That the new vessels built in Canada during the year 1874 aggregated 190,756 tons, while last year the new tonnage only aggregated 18,554 tons, or less than one-tenth of the tonnage built thirty years ago;

That the foregoing statements prove that Canada is steadily losing control of her own carrying trade, and that her builders are unable to compete with the highly developed yards of other countries;

That nearly all other countries have found it necessary to grant financial aid to their own builders in order to secure a share of their own carrying trade, and that such aid has in most cases enabled them to build up well equipped shipbuilding plants that are now able to compete with foreign builders;

That an effort should now be made to resuscitate this industry, which would provide skilled labor for our artisans, keep in the country the enormous sums paid out in freights, and enable Canada again to take her place as an important maritime power;

Therefore, Resolved, That we hereby urge the Dominion Government to take up this important question during the approaching session of Parliament, and grant such adequate bounty on tonnage launched in Canada during a term of years as would place our builders on an equality with their chief competitors elsewhere.

Duty on Government Imports.

The question of the consideration of duty on all articles imported by the Government was brought to the attention of the Committee by the Montreal Branch of the Association and the Committee recommends that the Association

approve of a resolution and forward the same to the annual meeting for consideration, as follows:—

Resolved, That when articles are purchased by or for the use of the Dominion Government or for any of the Departments thereof, or by or for the Senate or House of Commons or by the National Transcontinental Railway or Intercolonial Railway or for any other purpose, that in each case the amount of duty taxable on such articles (including the duty leviable under the Dumping Clause regulation) should be carefully considered, and the full amount of such duty should be added before prices are put into competition with Canadian prices.

Duty on Repairs.

It was brought to the attention of the Committee that certain articles sent out of the country for the purpose of being repaired were not allowed re-entry by the payment of duty on the cost of repairs, and the Government claimed that they were not entitled to such consideration. The Committee requested the Chairman and Secretary to carefully look into the question as to whether or not the duty on repairs was fully covered in the Customs Act, and, if it was not, that a resolution should be drafted to the effect that on goods exported for repair purposes, the duty should only be paid on re-importation on the value of repairs.

The report was considered clause by clause and adopted as above. A few changes, which have been incorporated, were made.

PARLIAMENTARY COMMITTEE.

The report of the Parliamentary Committee was presented by the Chairman, Mr. Geo. W. Watts. The report dealt with a number of different subjects, the most important of which were:

A Scarcity of Labor.

In response to the labor enquiry circular sent out on June 28th to the 1913 different factories represented in the Association, up to the date of the meeting 312 replies have been received. Of this number 203 require help amounting in all to 6,179, divided as follows:—

Men,	Women,	Girls,	Boys,
3,310	1,231	1,183	455

These returns have been tabulated and are published in full in another column of INDUSTRIAL CANADA. The Committee decided that these should be printed in circular form and copies sent to the Minister of Labor, Minister of the Interior and the leading British and Canadian newspapers.

Organization of a Labor Bureau.

The Committee acting with the approval of the Executive Council asked for an expression of opinion from the members regarding the organization of a Labor Bureau. A representative list of members put themselves on record with regard to the same. These with two exceptions supported the organization of a Department. The Committee after careful consideration decided to make the following recommendation to the Executive Council.

That, in view of the labor situation in Canada at the present time, and of the replies received to the enquiry circular sent out to the members of the Association on June 28, 1906, the Committee recommend that the Executive Council appoint a special Labor Department Committee for the purpose of presenting a scheme for the organization, management, and financing, of a Labor Bureau in Great Britain, supplemented with whatever organization is deemed necessary in Canada; and that the Committee be authorized to make such investigation and expenditure up to $200 as are deemed necessary for the purposes of the Committee; and that the Committee be asked to report progress at the August Council meeting and have a final report ready to submit to the Annual Meeting in September.

This resolution was discussed at length. One suggestion that met with favor was that an office, to be known as the office of the Canadian Manufacturers' Association, should be opened to carry on, not only the work as outlined in the resolution, but also the general work of the Association. The resolution, as it stands, together with the rest of the report, was adopted, and a Committee appointed in accordance with this resolution as follows: Messrs. Geo. W. Watts, Toronto (Chairman), C. Bermingham, Kingston, Geo. McLagan, Stratford, J. S. N. Dougall, Montreal, John Turnbull, Toronto, and J. P. Murray, Toronto.

COMMERCIAL INTELLIGENCE COMMITTEE.

The report was presented by the Chairman, Mr. Thos. Roden, and dealt with different matters as follows:—

Metric System.

A communication was received from Mr. Geo. Moores, Secretary of the British Weights and Measures Association, to the effect that at the recent Postal Union Congress, it had been decided that for decimal-metric countries, one ounce avoirdupois should be equivalent to 20 grammes as far as weight of mail matter was concerned. Mr. Moore pointed out that this gave anti-metric countries an advantage of 40 per cent. It has been decided that this communication should be published in the next issue of INDUSTRIAL CANADA.

British Trade Representatives.

Mr. Kenric B. Murray, Secretary of the London, England Chamber of Commerce, forwarded a resolution passed by the London Chamber recommending Canadian commercial organizations to render Mr. Jas. Grigg, who is to visit Canada in the near future in the capacity of commercial commissioner, all the assistance possible.

The Committee took action by recommending a resolution to the Executive Committee as follows:—

"**Resolved,** That the Canadian Manufacturers' Associ-
"ation expresses its satisfaction at the appointment by the
"Board of Trade of a Commercial Commissioner to visit
"Canada and report on the possibilities of increasing trade
"between the Dominion of Canada and the United King-
"dom and take pleasure in offering the services of the
"Association for the purpose of assisting Mr. Grigg to
"secure such information as he desires."

The Committee also suggests that Mr. Grigg be forwarded an invitation to be present at the annual meeting of the Association to be held in Winnipeg.

British Chamber of Commerce.

A letter was received from the President of the British Chamber of Commerce, Paris, France, of which chamber a section has been organized for the purpose of increasing trade between Canada and France, offering to supply information or offer assistance regarding French markets, and suggesting that mutual correspondence be carried on for this purpose. The letter also intimated the intention of the Chamber to advocate the extension of the Franco-Canadian Treaty. It was recommended that (1) the letter should be made public through INDUSTRIAL CANADA, (2) no action should be taken regard-

ing the Franco-Canadian Treaty, (3) the Association should offer its services to the French Chamber of Commerce to supply them with any information they desired about Canadian trade.

British Consuls in United States.

A communication was read from Mr. J. P. Murray calling the attention of the Committee to the weekly report of the Department of Trade and Commerce, June 18th, 1906, containing correspondence which had passed between the Superintendent of the Commercial Agencies and the British Consuls of the United States. This correspondence shows that the British Consuls are practically unanimous in their desire to assist Canadian merchants to build up trade. The Committee respectfully recommend that the thanks of the Association be tendered to the Department of Trade and Commerce for the publication of this valuable information.

Reports re British Packing Houses.

Mr. W. R. Landon wrote to the Association enclosing clippings which have been in Ontario papers reporting unfavorably on British manufacturers of food products and suggesting that in the interests of Empire trade the Association should endeavor to find out whether or not thereports emanated from Great Britain. The Committee requested the Secretary to forward the clipping to the Secretary of the London, England, Chamber of Commerce and request the desired information.

Anglo-Japanese Treaty.

The Committee are pleased to announce that negotiations, which have been going on for some time between Great Britain and Japan with regard to a Treaty now existing for the purpose of securing for Canada more favorable tariff treatment has been successfully negotiated and is now in effect. The Committee are of the opinion that the Treaty will be of great assistance to Canadian firms in extending their trade in Japan. This is a matter that the Association has interested itself in since July, 1903, and they view with satisfaction the successful termination of the efforts of the Government.

Stamped Envelopes.

The Committee has investigated the issue, use and return, of stamped envelopes both in Canada and the United States. The investigations show that envelopes are issued by the United States Government much more cheaply than by the Canadian Government. Business addresses of firms in the United States are printed by the Government without extra charge and very simple arrangements are in effect for the return of spoiled envelopes. The Committee would recommend that these facts be put before the Postmaster-General with the recommendation from the Association that improvements should be made in the Canadian service.

The report was on motion adopted.

RECEPTION AND MEMBERSHIP COMMITTEE.

This report was presented by the Chairman, Mr. L. V. Dusseau. Thirty-seven applications for membership were recommended for acceptance, and the names of these applicants are published in another column.

Winnipeg Convention Arrangements.

The Committee reported at length on arrangements already completed and under way for the Winnipeg convention to be held on September 17, 18 and 19 next. The Manitoba Branch are sparing no efforts to make the convention a great success. The meetings will be held in the new C. P. R. hotel, the Royal Alexandra, and this hotel is undertaking to look after the visitors who wish to stay there. The banquet, for which arrangements have been made, will also be held in the C. P. R. Hotel. A number of invitations and acts of courtesy have already been tendered the Association and these will be published in the convention programme at a later date.

Western Excursion.

A large number of reservations have already been made for the trip to the Pacific Coast. Six cars have been filled and the Manitoba Branch have asked to have one car reserved for Manitoba members at Winnipeg. Thus a train of seven coaches from Winnipeg West, which will be as large as the train which crossed the continent in 1903, is assured.

The Committee have been very strict with regard to applications for reservations, and no reservation has been made unless the party making the same is a bona-fide member in good standing of the Association.

INSURANCE COMMITTEE.

Mr. E. P. Heaton, Manager of the Insurance Department presented the report of the Committee, which is as follows:—

Mutual Company Organization.

The Insurance Committee have pleasure in reporting that the circular letter to the members of June 15th on the subject of Mutual Fire Insurance has met with most unexpected and encouraging results.

In all 230 members have responded as follows:—

212 return agreements duly signed promising definite support to the proposed companies in sums varying from $1,000 to $100,000.

16 write approving the formation of the proposed companies.

1 expresses the conclusion that the amount of insurance the companies propose to carry is too small to make the matter interesting.

1 disapproves of the principle of mutual fire insurance.

230

In the form of agreement it was suggested that a minimum amount of insurance of $500,000 would require to be definitely pledged before further proceedings would be taken, in other words that 100 members would pledge insurance to the extent of $5,000 each on their respective plants. There has been so far received 212 definite agreements promising $1,845,500 of which, however, not more than $967,500 will be available at the outset; this, however, is practically twice the minimum fixed in the agreement.

It will be interesting to know that of the 212 signed agreements 50 offer from $10,000 to $100,000.

127 offer the limit of $5,000.

35 offer from $1,000 to $4,000.

212

It will be apparent that one of the problems that will have to receive attention soon after organization will be the question of the limit to be carried on any one plant, and if by reason of the general support, and the distribution of risk, it be found practicable and desirable to carry more than $5,000 on any one plant, the measure of useful-

ness to the members will be thereby so much enhanced. The Committee cannot but express their gratification at the unexpectedly large number and favorable nature of the responses received, and in harmony with that part of their report when this subject was first introduced, they have requested the Reception and Membership Committee to allot an hour during the convention to be held in Winnipeg for the holding of the inaugural meeting of the subscribers. The Insurance Committee will thereupon be relieved of all further proceedings and work in this matter.

In regard to the proposed Standard Mutual Company in affiliation with the New England Mutual Companies, the Committee has also pleasure to record the receipt of most favorable agreements in both number and extent from members presently insured in those offices, but they are not prepared to deal more fully with this particular feature at the present time.

During the month matters of interest to members of the Jewellery Section, and to those engaged in the lumber industry have been arranged by the Department, and while details cannot be given in a report of this nature, any of the members interested in either of these branches of manufacture are invited to correspond with the Manager of the Department with a view to securing further information.

It becomes necessary that the names of seven members of the Committee be selected for retirement this year, and it is recommended they be the following:—

Messrs. Col. J. H. Burland . . ..Montreal.
C. N. Candee . . ..Toronto.
W. A. Gandle . .....Montreal.
W. P. Gundy . . ..Toronto.
Geo. McAvity . . ..St. John.
Dr. Ed. Morin . .....Quebec.
F. B. Polson . . ..Toronto.

RAILWAY AND TRANSPORTATION COMMITTEE.

This report was presented by the Manager of Transportation, Mr. J. R. Marlow, and on motion was adopted as follows:—

Mr. Marlow reported that the bill to amend the Railway Act by making express companies subject to the tolls clauses and their rates and forms of contract subject to the jurisdiction of the Railway Commission had finally passed the Dominion Parliament. In this amendment provision is also made to overcome the difficulty in the matter of interswitching arrangements where the railways refuse to provide transfer tracks. The Railway Commission is now empowered to require the construction of such tracks where, in their opinion, deemed necessary.

New Zealand Steamship Service.

A communication from an accredited correspondent complains of the steamship service between New Zealand and Canada recently subsidized by the Dominion Government to the extent of $50,000.00. It is claimed the steamers are not suitable for the trade; they are not fitted with refrigerator or cool storage to handle perishables, insurance is said to cost one-eighth higher than on more modern ships of other routes, and notwithstanding those disadvantages, it is said the contractors are charging the same, or higher rates, than on mail steamers of other routes. It is claimed that unless this is changed the hopes of those who procured subsidy for the new service will not be realized. Advice from the Department of Trade and Commerce indicates that the Canadian Government arranged the subsidy at the urgent request of New Zealand through Sir Joseph Ward, who practically arranged the contract, Canada simply acquiescing. The Committee decided to refer the question to the British Columbia Branch, requesting them to appoint a sub-committee to inspect the first steamer to arrive and to interview the resident manager of the line, reporting the result. Meantime the matter is in abeyance.

Goods Lost in Transit by Fire.

Complaints were before the Committee of refusal of railway companies to pay for goods destroyed by fire while in their possession. The attitude of the railways is that they are not responsible for loss by fire when goods are in transit, owing to the conditions of the bill of lading contract, which specially relieve them from responsibility; and when goods have arrived at destination they are in the position of warehousemen and, therefore, can be held accountable only in the event of negligence being shown.

The Committee decided unanimously to recommend that the Executive Council should urge upon the Railway Commission to require a prompt revision of the railway companies' contract forms for the purpose of eliminating these objectionable conditions.

Case of Stauntons' Limited.

The Manager of the Transportation Department reported that decision has been issued by the Railway Commission in the case of Stauntons' Limited requiring the interested railways to reduce the rates east-bound on wall-paper to points east of Montreal, Quebec, Levis, and the Maine Boundary to the basis of the tariffs for similar traffic west-bound between these points.

Canadian Salt Company's Case.

This case has reference to the exaction of a switching charge in addition to the regular freight tolls on carload shipments of salt from Windsor to Grand Trunk points. Mr. Marlow reported that at the suggestion of the Railway Commission an application has been sent to the railway companies for through rates under section 266 of the Act. The Railway Commission states that if the railways fail to comply with the request an application should then be made to the Board to require them to agree upon and file such joint tariff.

Winnipeg Switching.

At the request of the Manitoba Branch the question of switching charges assessed by the railways in Winnipeg over and above the regular freight tolls has been taken up with the Railway Commission, and the reply indicates that the matter will be investigated in the very near future when the Commission will be at that point.

A. Belanger's Overcharges.

The Manager reported that a complaint of A. Belanger, of Montmagny, Quebec, of excessive charges on agricultural implements by the Atlantic and Lake Superior Railway has been adjusted through the offices of the Railway Commission. The railway insisted upon charging at estimated weights, but have been ordered to weigh shipments and charge only at the actual weights.

Import Rates on Paper.

A complaint received from the Montreal Branch of alleged discrimination by steamship lines in rates on paper against British and in favor of Continental ports was reported upon. The Allan and Dominion lines claim that they have no service from Continental ports and their rates from British ports are this season lower than formerly. The Canadian Pacific lines state the matter is under consideraton by the steamship interests concerned and the

result would be advised later. This information has been communicated to the Montreal Branch.

Minimum Weight of Tan Bark.

At the request of McQuay Tanning Company matter of minimum weights on tan bark was taken up with the Canadian Pacific Railway, who have agreed to modify the minimum weights in their special tariffs on tan bark to conform to Canadian classification.

Staking of Flat Cars.

A communication was received from Mr. Loud, Chairman of the sub-committee appointed by the railways to deal with the question of staking flat cars for lumber shipments, stating that the Committee are unable to comply with the request of the lumbermen to stake flat cars or pay the shippers for this work and pointing out that they have so far found it impracticable to construct a car with permanent stakes which would prove satisfactory. They requested that the matter be allowed to remain in abeyance until the results of hearings before the Interstate Commerce Commission in the United States are made known. It is the understanding that whatever is decided in the United States will apply to Canada on account of the interchange of railway cars between the countries.

The Manager reported that he had communicated also with Mr. Babcock, of Pittsburgh, who is associated with the movement on the other side, and he replies that they are now testing the efficiency of permanent stakes, recommended by the joint committee on gondola and flat cars. The proceedings before the Interstate Commerce Commission have been adjourned meantime.

It was the unanimous view of the Committee that the matter should remain in abeyance waiting the outcome of the action by the United States shippers.

Coal Rates.

Communications were received from the presidents of the Galt and Guelph Boards of Trade respecting the arrangement of rates on coal from the various Ontario gateways. The Manager, having investigated the subject, was authorized to reply to the communications giving complete information respecting the reasons for the present rate adjustment and the attitude of the railways. It was the opinion of the Committee that owing to conflict of interests any applications for revision would necessarily require to be dealt with locally.

Restriction of Liability by Water Carriers.

Communications from Mr. J. P. Murray, calling attention of the Committee to the conditions of carriage adopted by carriers on inland waters were dealt with. Mr. Murray complains of such carriers being relieved from liability as insurers of property in transit, and expresses the view that in the interests of commerce these conditions should be modified. While recognizing that this was a subject of vital importance to many members, the Committtee, after discussing the subject, were not of opinion that any action could be taken at the present time to advantage.

The report of the Montreal Branch was read by the Secretary, and the report of the Toronto Branch by Mr. John Firstbrook, the newly elected Chairman. These reports are published in full in another column.

The meeting then adjourned.

NEW MEMBERS.

Passed by the Executive Council, July 1906.

Brantford, Ont.

Scarfe & Co.—(F. J. Scarfe, 2nd Member.)

Dundas, Ont.

Pratt & Whitney Company of Canada.—Small Tools, Twist Drills, Taps, Reamers, etc.

Galt, Ont.

The Stevens Company of Galt, Ltd.—Machines and Tools.

Grande Point, Man.

The Manitoba Canning Co., Ltd.—Canned Meats.

Lindsay, Ont.

The Flavelle Milling Co., Ltd.—(Jos. J. Macdonnell, 2nd Member.)

Montreal, Que.

The Ames-Holden Co., of Montreal, Ltd.—(R. C. Holden, 3rd Member.)

Henry Birks & Sons, Ltd.—(Henry Birks, 2nd Member.)

Friedman Bros.—Wholesale Clothing.

Martin Freres & Cie.—Packing Cases and Boxes.

Niagara Falls, Ont.

Niagara Falls Machine & Foundry Co., Ltd.—Iron and Brass Founders, Machinists, etc.

Sussex, N. B.

Sussex Mfg. Co., Ltd.—Church and School Furniture.

Toronto, Ont.

W. H. Banfield & Sons.—Dies, Tools, and Special Machinery.

Commercial Acetylene Co., of New York.—Acetylene Gas Plants, Railway Car Lighting and Ventilators.

Gruff, Bredt & Co.—Covered Buttons.

MacLean Publishing Co., Ltd.—(H. T. Hunter, 2nd Member.)

Majestic Polishes, Ltd.—Polishes.

Norton System Telephone Co., Ltd.—Telephones, Switch-boards and Supplies.

Phillips Mfg. Co., Ltd.—(F. J. Phillips, 2nd Member.)

The Thomson Monument Co., Ltd.—Monuments.

Universal Systems, Ltd.—Business Systems.

Vancouver, B. C.

British Columbia Mills Timber & Trading Co.—(E. C. Mahony, 4th Member.)

Wiarton, Ont.

Siemon Bros., Ltd.—Hardwood Flooring.

Winnipeg, Man.

American Belt Co.—Belts.

The Boyce Carriage Co.—Carriages and Waggons.

W. R. & S. A. Campbell.—Gold Jewelry.

Corticelli Silk Co.—(W. A. Munro, 2nd Member.)

Foley, Lock & Larson.—Biscuits and Confectionery.

John Leslie Furniture Co.—Furniture and Upholstery.

The James McCready Co., Ltd.—(Arthur Congdon, 2nd Member.)

Munro Wire Works, Ltd.—(James Munro, 2nd Member.)

Schmidt & Co.—Brass and Ornamental Iron Work.

Smart-Bag Co.—(W. G. McMahon, 2nd Member.)

Stewart & Bird Co., Ltd.—Trunks, etc.

C. Vanderlip.—Popcorn.

White Star Mfg. Co.—Baking Powder, Extracts, Vinegar and Pickles.

Winnipeg Ceiling & Roofing Co.—Metal Shingles and Roofing.

Among the new members from Montreal passed in June and published in the July issue of Industrial Canada appeared The Imperial Watch Co., Limited. This should have read The Improved Watch Co., Limited.

ANNUAL MEETING OF TORONTO BRANCH

THE annual meeting of the Toronto Branch of the Canadian Manufacturers' Association was held in the offices of the Employers' Association, 18 Victoria Street, on Tuesday, July 10th, at 2 p.m.

Mr. W. B. Tindall, (Chairman), presided, and there were also present,—Messrs. S. R. Hart, J. C. Scott, Geo. Anderson, Richard A. Donald, Edwin C. Walker, Ed. Freyseng, D. T. McIntosh, S. H. Chapman, R. Myles, J. W. Cowan, J. P. Murray, J. J. Eaton, J. O. Thorn, John Firstbrook, J. H. Paterson, Alf. Burton, Geo. H. Campbell, W. P. Gundy, A. S. Rogers, John Donogh, G. H. Muntz, Jas. R. Roaf, G. A. Howell, L. V. Dusseau, Jas. M. Sinclair, A. C. Knight, W. K. McNaught, Chas. S. Meek, G. Frank Beer, B. Fletcher, Thos. Roden, L. G. Amsden, and others.

The minutes of the last annual meeting, as published in the September, 1905, "Industrial Canada," were taken as read.

SECRETARY'S REPORT.

The Secretary, Mr. G. M. Murray, presented his report, which covered some of the statistical features of the branch's work.

During the year the Executive Committee had held ten meetings, with an average attendance of seven while the special committees working under the direction of the Executive Committee had held fourteen meetings, with an average attendance of four. In addition to these committee meetings, the branch had held three dinners and a banquet, and had organized eight deputations to represent it on as many different occasions. The net increase in membership had been sixty-eight.

Reference was made to the loss sustained by the branch through the death of Mr. R. W. Elliott, and Mr. Robt. Crean. In these men the Branch had lost two warm friends and faithful workers, whose advise and sympathy would be greatly missed, and whose departure would be deeply mourned.

REPORT OF THE EXECUTIVE COMMITTEE.

The report of the Executive Committee was presented by the Vice-Chairman, Mr. John Firstbrook, and read as follows:—

Your Executive Committee have pleasure in reporting a year of useful activity and progress. In all ten meetings have been held with an average attendance of seven. A close watch has been kept over the varied interests which you hold in common, and a number of matters of the first importance have been dealt with.

The Assessment Act.

Early in the year attention was drawn to the handicap under which city manufacturers were laboring through the peculiar operation of the Ontario Assessment Act. Property values are, of course, much higher in the city than in the smaller towns, and it was pointed out to us that the 60 per cent. clause of the Assessment Act affected local manufacturers somewhat seriously as compared with their outside competitors. Your committee caused an enquiry to be made among the members of the Branch as to the amount of their assessment under the old and under the new law, and in all some 96 replies were received. From the 65 of these returns which it was possible to tabulate the increase amounted to only $230,000, or an average of $3,538 each. On account of the meagre returns, and the insignificance of the increase in taxation to which they pointed, the committee did not feel justified in taking any action, and would recommend that the matter be left over until the new measure has had a fair trial.

Water Rates.

A communication having been received, suggesting the advisability of putting water rates on the meter basis, a careful investigation was made of the conditions under which water was supplied to local manufacturers, and a report was prepared showing the rates charged in the cities of Hamilton, Detroit, Rochester, Buffalo, London, Pittsburgh, Montreal, and Toronto. From a comparison of these rates it became evident that Toronto manufacturers were most favorably situated, so it was decided to take no further action.

More recently our attention was drawn to the fact that the city had offered to supply the Junction with water at three cents per thousand gallons. The interests of Toronto manufacturers were thereby prejudiced as the local rate to factories is 6¼ cents per thousand gallons. The attention of the Department was at once called to the discrimination, and we are glad to report that the offer was promptly withdrawn.

A Minimum Wage.

Details of the discussion regarding the question of a minimum wage for all corporation employees are still too fresh in the minds of members to call for more than passing reference. Suffice it to say that your committee opposed the measure most strenuously, not on the ground that the proposed wage of $2 was too high, but because the principle was a pernicious one, calculated to promote the influx of thriftless and improvident workmen who must ultimately become a burden on the city, calculated also to foster a spirit of discontent among factory employees, and to discount the earning capacity of the industrious worker. The case of the manufacturers was presented to the Board of Control by your committee, who had previously secured the endorsation of the Branch by means of a petition very largely signed by the general membership. The Board's proposal to make the minimum wage applicable to all civic contracts was finally dropped, though its adoption for corporation labor was carried, despite our best efforts.

Workingmen's Houses.

A matter calling for prompt and serious consideration on the part of the Branch is the scarcity of suitable houses for the working classes. Building restrictions and the extension of the fire limits have practically legislated the moderate priced house out of existence, with the result that an increasing number of our workmen are compelled to seek shelter in unsuitable quarters, or to pay a rent out of all proportion to their earnings. This condition has complicated the labor situation in Toronto very seriously, and it is of the utmost importance that some relief be provided. The question had been under consideration by the committee, who have instructed your representatives on the Toronto Civic League, to confer with the representatives of the other organizations in the League, with a view to investigating the matter thoroughly, and, if thought advisable, to evolve some

plan whereby suitable houses could be built and supplied at a reasonable rental.

Municipal Power Commission.

Perhaps no single event during the past year has been fraught with deeper significance for the manufacturers of Toronto than the publication of the report of the Ontario Power Commission. Its value as a contribution to the subject of hydraulic and electrical engineering, and the public ownership of transmission lines and lighting plants, is unquestioned. Throughout the preparation of this report, Toronto was ably represented by Mr. P. W. Ellis, to whom we are under great obligations for the faithful and energetic manner in which he applied himself to this stupendous task. On the publication of the report your committee joined hands with the civic officials and the representatives of other municipalities throughout Western Ontario in urging upon the Government the need for prompt action to secure cheap power, with the result that Hon. Mr. Beck's measure, providing for the construction of transmission lines by the Government, was shortly afterwards introduced and carried.

Smoke By-Law.

During the year a great deal of thought has been given to the subject of the Smoke By-Law. Your Committee is fully seized of the importance of this measure, and the necessity for an abatement of the smoke nuisance from the standpoint of public health and cleanliness, but believe that the best policy is to make haste slowly until such time as the phenomena of combustion are more fully understood, and appliances placed upon the market that will produce more satisfactory results. To enforce the law regardless of conditions would not only be inflicting undue hardships on manufacturers already located in the city but would tend to discourage new industries from coming to Toronto, and thus interfere with that policy of industrial expansion which it should be our first care to foster. The importance of abating the smoke nuisance from an economic standpoint has not been overlooked, and steps have been taken to secure prompt information regarding new devices that are placed on the market from time to time. It might be mentioned that the Branch was represented at the International Convention of Smoke Inspectors held in Detroit last month, and that everything is being done to co-operate with the civic officials to the fullest possible extent.

Stationary Engineers' Bill.

The Stationary Engineers' Bill, passed by the Ontario Legislature at its last session, furnishes an example of a particularly vicious kind of legislation which the Branch should take more active steps to oppose in future. While this matter was properly handled by the Parliamentary Committee of the Association, it originally came up for consideration by the Executive Committee of the Toronto Branch as the Branch was advised that the first efforts of the engineers were to be directed towards having the city pass a by-law compelling all engineers in charge of steam boilers within the city to take out licenses. Notwithstanding the most determined opposition of the Parliamentary Committee, in which they were ably assisted by members of the Association in various parts of the Province, the bill finally carried, though it is gratifying to be able to report that some amendments were incorporated which overcame a few of the most objectionable features of the measure. In future, however, we believe the Branch should have some auxiliary machinery at its disposal wherewith to assist the Parliamentary Committee of the Association in work of this kind, and a suggestion will be laid before the incoming Executive that steps be taken to that end.

Pawn Brokers.

Another effort was made during the past year to interest the Ontario Government in placing the business of pawn brokers under stricter supervision. The Premier and the Attorney-General have been written to and interviewed, and though they have promised to give the matter careful consideration, no definite action has been taken. At the suggestion of interested parties, representatives of the Branch and of the Jewellers' Section will co-operate during the next few months in drafting a bill for introduction into the House, and your Committee hope that before another year has passed the abuses of the present system will have been corrected.

Collection of Ashes.

Considerable inconvenience has been experienced by manufacturers owing to the fact that the free removal of ashes from factories is limited to two loads per week. Representations were made to the Medical Health Officer to have the extra charge of 50 cents per load done away with, and a recommendation was passed on to the Board of Control to that effect. Unfortunately it did not carry, but the matter will not be allowed to drop.

TECHNICAL EDUCATION.

The report of the Technical Education Committee was presented by Mr. S. M. Wickett. Mr. Wickett began by referring to the importance of this question, and the gradual awakening of the manufacturers to its significance. He instanced the fact that it has been estimated by the Montreal Branch of the Association that $100,000 was being sent out of that city every year by workmen and others to foreign correspondence schools, and expressed his belief that similar conditions prevailed in Toronto.

He reported regarding the interviews of the committee with Dr. Pakenham, when the acommodation and eqiupment of the Toronto Technical High School were carefully considered. The committee had lent its support to the recommendations made to the Board of Control for an increased appropriation, and it was gratifying to be able to report that the appropriation had been increased to $250,000. It was hoped that the city would soon be provided with new schools which would be well equipped.

Mr. Wickett next went into details regarding the petition which was presented to the Dominion Government in May, asking for the appointment of a Commission to investigate and report on the advisability of establishing a national system of Technical Schools.

In conclusion he recommended that inasmuch as the work of the Committee was by no means done, it should be continued in office as a standing committee of the Branch.

TORONTO BRANCH DINNERS' COMMITTEE.

On behalf of the Toronto Branch Dinners Committee, Mr. Ed. J. Freyseng, presented a report outlining the programme of monthly dinners, which had been carried out under the auspices of the Branch. He referred also to the very successful function arranged in honor of the Hon. Rodolphe Lemieux and Mr. R. J. Younge, and to the entertainment which had been provided for the National Editorial Association of the United States, on the occasion of their visit to Toronto, June 25th.

After this report had been adopted, the Chairman took occasion to compliment Mr. Freyseng on the very able manner in which he had managed this feature of the Branch's work, and congratulated the Branch on the appointment of so efficient an officer.

A RECORD OF PROSPERITY

CHAIRMAN'S ADDRESS AT ANNUAL MEETING OF TORONTO BRANCH.

To the Members of the Toronto Branch, Canadian Manufacturers' Association:—

It is with more than ordinary pleasure that I welcome you to the annual deliberations of the Toronto Branch of the Canadian Manufacturers' Association to review the work of the year which has just closed, and to survey the problems which are confronting our organization.

The past year has been one of unusual prosperity. Every department of Canadian industry has felt the throb of quickened life. The farm with abundant harvests, the factories with larger orders, the railways and steamship lines with more traffic, and the enormous increase in immigration from the old land as well as from the new to the south, all have added to our national earning power.

A few figures as indicating a satisfactory expansion in our foreign trade are of interest.

Ten Months Ending April, 1906.

Imports, exclusive of coin and bullion, increase, $25,280,200, 12½%.

Exports, Domestic merchandise, increase, $35,815,754, 20%.

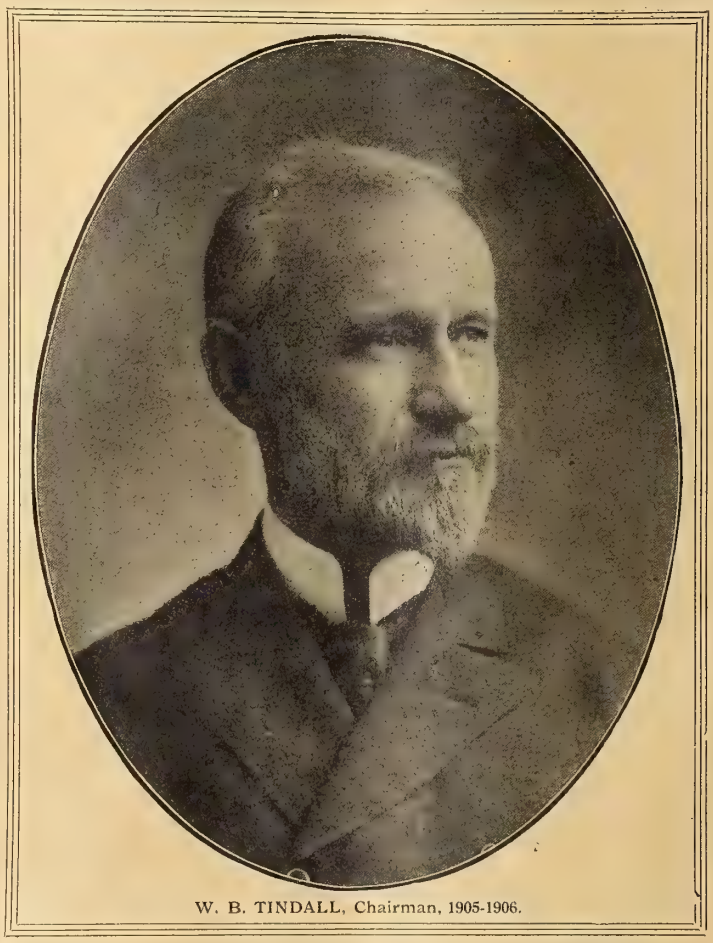
These figures promise a reduction in the balance of trade which has hitherto stood against us.

Domestic Trade.

Domestic trade is in a most flourishing condition. There are unfortunately no statistics showing our production from year to year so that it is difficult to form an accurate estimate as to what proportion of our output is marketed at home. But in the census year 1901, it has been shown, by deducting the exports of agricultural produce from the total production, that 78 per cent. of our farm produce was consumed in the home market.

In the case of manufactured goods the value of the home market is even more pronounced. The annual output of our factories has been conservatively estimated at $650,000,000. The total exports of manufactured goods for the fiscal year ending June, 1905, including such articles as sawn lumber, canned and cured meats and fish, cheese, flour, etc., amounted to $102,000,000. From this it will be seen that 84 per cent. of the goods manufactured in Canada are consumed in the home market.

Our home market is clearly our greatest market and is ever growing greater. The enormous development of our North-West with a promised harvest, some say, of 120,000,000 bushels, the projected additions to our railway mileage, (Grand Trunk Pacific, 3,720 miles; lines controlled by Jas. J. Hill, 3,000; Canadian Northern and Canadian Pacific, 3,000; Total, 9,720 miles); the opening up of the rich Temiskaming country, the settlement of the Lake St. John District in Quebec, and the development of our water powers all give promise of an expanding market for manufactured goods.



W. B. TINDALL, Chairman, 1905-1906.

Toronto's Prosperity.

With the general development and prosperity of the country the city of Toronto has kept well in pace. She is rapidly becoming, if she has not already become the commercial and industrial centre of the Dominion. Her population, as shown by the last police census taken in 1905, was 262,749; to-day it can be very little short of 300,000. Her total assessment for 1905, exclusive of exemptions, was $149,000,000; for 1906 it is $167,000,000—a gain of $18,000,000. Building permits were issued in 1905 to the number of 3,753, representing a value of $10,347,915, as against 2,489 in 1904, with a value of $5,896,120, an increase of nearly $5,000,000. The revenue of our post-office has risen from $700,000 in 1902, to $1,050,000 in 1905, an increase of 50 per cent. in four years. Montreal, which surpasses us in population, shows a postal revenue nearly 33 per cent. smaller than ours. Truly Toronto is securing her full share of trade if the postal returns are any indication.

Collections at the Customs House give evidence of a growth in purchasing power that is commensurate with the expansion along other lines. In 1904 they were $8,185,258; last year they were $9,524,610, an increase of $1,339,352, or over 16 per cent. The steady expansion of trade is still further evidenced in the clearing house returns. In 1900 these amounted to $512,696,401; by 1904 the figures had jumped to $842,097,066; last year they reached the stupendous total of $1,047,490,701, an increase over six years ago of 100 per cent., and over two years ago of nearly 25 per cent. To-day there are twenty-three chartered banks doing business in our city, some of them ramified with a dozen branches.

Figures of this sort might be multiplied at considerable length, but enough has been said to prove that Toronto is truly a great city, and rapidly growing greater. The factors which have contributed to her expansion are many and varied, such as her educational institutions, which attract fully 10,000 students every year, her publishing houses, which

print and circulate upwards of 180 periodicals, and her wholesale houses which, through the facilities provided by the railway and steamship companies, distribute goods of all kinds to every part of the Dominion and elsewhere.

Industrial Toronto.

But it is after all to her busy work-shops that Toronto looks with pride as the foundation stone for all her greatness. A conservative estimate of the industrial establishment of all kinds operating within the city places the number at 1,200. Familiarity, it is said, breeds contempt, and we are prone to take things for granted without enquiring what they really mean to us. But consider for a moment, what would Toronto be without her 1,200 factories? These hives of industry constitute a big city in themselves, with their 60,000 employees, their $70,000,000 of invested capital, and their $90,000,000 annual output. The manufacturing interest is unquestionably Toronto's greatest interest. To conserve that interest and to foster its development should be one of the first cares of those in authority, and an organization such as ours, whose object is to unite the manufacturers together, to preserve their common rights, and to build up the city, is doing a public work for which it should receive public recognition.

The Labor Situation.

Viewing the situation in Toronto from the manufacturers' standpoint, one of the most disturbing features is the labor problem. Skilled help was never so difficult to procure and so difficult to retain as it is to-day. The number of skilled mechanics in the country has not grown in anything like the same proportion as the factories themselves have expanded, and unless our manufacturers are able to fill the orders that are pouring in upon them the tide of trade must soon be turned in some other direction. The passive policy of the Dominion Government in regard to the immigration of skilled workmen is greatly to be deplored. While we recognize the importance of putting forth every effort to secure suitable settlers for the prairie provinces we believe that the movement should not be one-sided. No nation can ever become great that devotes itself exclusively to agriculture. Its aim should be to become self-supporting, to produce within its own borders as much as possible of what is required for its national sustenance. It would certainly be a very great pity indeed if the splendid market for manufactured goods, which must inevitably arise in the North-West, were to fall to the lot of the United States, through the inability of the Canadian manufacturer to secure sufficient help to man his factory. But that is the prospect with which we are threatened by our immigration policy, and the operation of the Alien Labor Act. Little wonder that under these circumstances the Canadian Manufacturers' Association should be forced to consider the establishment of a Labor Bureau in England, to assist its members in securing the help which their businesses actually demand.

The local situation is further aggravated by the enormous increase in living expenses. Notwithstanding the reductions which have year by year been effected in the price of most kinds of manufactured goods, the prices of farm produce, and the bare necessities of life have steadily appreciated. A still greater appreciation has taken place in rents, a matter to which I will refer later.

Technical Education.

The lack of facilities for technical education and industrial training is also a drawback. Before the modern factory came into existence the system of apprentices obtained, whereby a workman was trained in all the branches of his trade. With the advent of the factory, the introduction of machinery, and the tendency to specialization, this order of things has changed. To-day the average workman has degenerated into little more than a machine tender, knowing nothing about the various processes that enter into the manufacture of the article, beyond the one at which he is engaged. To offset this condition, Germany, England, and the United States are spending large sums of money for technical and trade schools, where factory operators may become proficient in all branches of their work, and equip themselves with a knowledge that will fit them for higher positions. The tremendous strides which Germany has made along industrial lines in the last few years is due to no other reason than her determination to excel in technical instruction.

After referring in a general way to the work of the Association the growth of membership and the relative strength of the Toronto Branch the Chairman continued:—

A Publicity Department.

The remarkable strength of our Branch makes it an organization of which we are justly proud. Considering what it represents in invested capital, in value of output and in wages, it seems safe to assume that it could wield an influence possessed by almost no other organization in the city. This fact suggests the desirability of greater activity on our part to make use of our powers in furthering our mutual interests and the interests of the city at large.

One of the first suggestions I have to make is that the Branch should organize a publicity department. Such a duty should not devolve upon an association of manufacturers, but unfortunately evidence is not wanting to show that the advertising of the city's many advantages is a matter of comparative indifference to those who should be the first to take action. We all believe that tourist traffic to Toronto could be greatly stimulated, that the investment of outside capital in legitimate enterprises could be promoted, and that the general progress of the city could be furthered by the judicious expenditure of a moderate amount of money in advertising. Almost every up-to-date city in the United States has its Citizens' League, or its Tourists' Association, for furnishing all kinds of useful information and for publishing attractive literature descriptive of the city's advantages, but Toronto, strange to say, has not seen fit to adopt this progressive policy. I do not wish to be understood as advocating that our Branch should go this far, but I do think that we might advertise ourselves as being in a position to furnish full and accurate information regarding available factory sites, shipping facilities, rents, taxes, rates of wages, cost of light, water and power, to foreign manufacturers who are contemplating the erection of branch plants in Canada, get work, and the employer skilled labor. No one should be better able to advise manufacturers on these points than ourselves, and the results, I feel sure, would more than compensate us for the small outlay involved.

Smoke Abatement.

Another matter calling for serious consideration is the question of smoke abatement. In certain quarters the manufacturers are being censured for their open violation of the Smoke By-Law; they are said to be utterly indifferent to any consideration of public health or cleanliness, and that they will never invest the few hundred dollars necessary to equip their plants with consumers until they are held up by the throat and made to do so. Such statements, needless to say, are uncalled for, and are made without a full knowledge of the facts. The manufacturer is just as anxious as any other citizen to keep the city clean and beautiful. In the case of smoke abatement, he is prompted by the additional motive of economy, for who does not know that the gases escaping from his chimney in the form of smoke represent from 12 to 15 per cent. of his coal bill?

Sewage Disposal.

Much has been said at former meetings of the Branch in regard to the disposal of our sewage, and the straightening of the Don. These are matters which should not be neglected, as when accomplished they would pave the way for a cleaner and better harbor, which, with the addition of some needed terminal facilities for the quick unloading of vessels, would have a tendency to increase our shipping trade and thus add to Toronto's importance as a distributing centre.

Workingmen's Houses.

The scarcity of moderate-priced houses for workingmen to which I have already referred is perhaps one of the most urgent matters calling for action on the part of the Branch. If the figures published in a recent edition of "The News," are correct, there are less than 2,000 houses in the city renting for $10 a month or under, while there are 22,000 male employees engaged in various industries, whose wages do not justify their paying more than that amount. This means that even at the liberal allowance of two breadwinners to every house, there must be at least 18,000 persons who are actually suffering by reason of high rents. As "Industrial Canada" puts it, "a few have found temporary accommodation in miserable hovels, unworthy of the name of homes; a somewhat larger number, unable to swallow their pride, have undertaken to pay rents which can only end in their financial undoing via the office of the loan shark; while still more have resorted to the unsatisfactory and unsanitary expedient of "doubling up" two, three, or sometimes even four, families combining to pay the rent of a single house. These conditions have not only given rise to widespread discontent, but have actually crippled a number of establishments by leaving them shorthanded, to say nothing of the industries that we might have had, but lost, simply through our inability to house the work people. To increase wages in proportion to the rise in rents is clearly impossible, for the margin of safety afforded by the tariff against the competition of cheap foreign labor is already very narrow in the majority of trades. The only rational remedy is to supply the demand, and plans to this end are now receiving consideration by the Toronto Civic League.

Other fields of activity for the Branch will readily suggest themselves to members present. Standing Committees should be appointed to supplement and relieve the work of the General Executive. Among those that might be suggested are:—

A Publicity and Reception Committee, to gather all kinds of information that would be of service to parties considering the establishment of industries in Toronto, to receive and entertain distinguished visitors, and to distribute literature descriptive of our city's advantages to tourists and others.

A Legislation Committee, to keep a close watch over matters affecting the interests of manufacturers at the City Hall, and to supplement the work of the Parliamentary Committee of the general Association, so far as it relates to Ontario Legislation. The powerful and influential machinery at our disposal in the Toronto Branch could, if more thoroughly organized, be brought into instant action in cases of emergency.

A Membership Committee, to prosecute vigorously the work of securing new members, so that all the manufacturers in the city might be united for the advancement of those interests which mutually concern them.

In conclusion I desire to record my grateful appreciation of the loyal support which has been given me by members of the Committee. It has indeed been an honor for me to have been associated with such public-spirited gentlemen in directing the affairs of this organization. My feelings of responsibility have at all times been lightened by the knowledge that I could count upon their heartiest co-operation. I also take this opportunity of thanking the officers of the Branch and of the Association for the exceptionally able assistance they have always given your Committee at their deliberations from time to time. Their efforts contribute in no small measure to the success of the Association. I also thank the members of the office staff for the interest they have taken in their work. I congratulate the Branch on the election of their new Chairman, and bespeak for him the same sympathy and support that have been accorded to myself.

RESOLUTIONS.

The following resolutions were then adopted:—

(1) **"Whereas,** The Provincial Government at its last session passed important legislation having to do with the supply of electric energy to municipalities;

"And, Whereas, It is important that Toronto, at the earliest possible moment, secure all possible advantages to be derived from such legislation.

"Therefore Be It Resolved, That the Toronto Branch, Canadian Manufacturers' Association, respectfully urge the Mayor and Council of the City of Toronto to take without delay such steps as are necessary under the Act to secure for Toronto all the advantages available."

(2) **"Be It Resolved** by this, the Annual Meeting of the Toronto Branch of the Canadian Manufacturers' Association in convention assembled, that recognizing the pressing importance for both workingmen and employers of adequate provision for industrial education, we again endorse the resolution of the general Association, which has received the uniform support of the heads of all our leading universities, of organized labor, and of the press of all political shades, respectfully asking for the early appointment by the Dominion Government of a Commission on Technical Education; and that a copy of this resolution be forwarded to the Right Hon. Sir Wilfrid Laurier."

(3) **"Whereas,** The Annual Meeting of the Canadian Manufacturers' Association has not been held in Toronto since 1903, since which time the Association has increased in strength from 1,200 to over 2,050 members, and many important developments in its organization and work have taken place;

"And Whereas, As there are 1,250 members of the Assocation in the Province of Ontario, it is reasonable to assume that there would be a larger attendance of members at the Convention in Toronto than at any other point, although the benefits to be derived by the Association, and by the country at large, by holding the Convention annually in different cities is fully appreciated.

"Therefore Be It Resolved, That the Members of the Toronto Branch, Canadian Manufacturers' Association, in annual meeting assembled, cordially invite the Canadian Manufacturers' Association to hold its 1907 Convention in Toronto, and request the Chairman of the Branch to convey this invitation to the 1906 Convention to be held in Winnipeg in September next."

(4) **"Resolved,** That the Toronto Branch of the Canadian Manufacturers' Association hereby expresses its appreciation of the kindness of the officers of the Employers' Association in placing at the disposal of the Branch the Chamber in which this meeting has been held."

(5) **"Resolved,** That the Dominon Government be respectfully requested to arrange at the earliest possible moment for the quick distribution of mail matter from the railway station to the several branch post offices, and that a copy of this resolution be forwarded to the Postmaster-General."

ANNUAL MEETING OF MONTREAL BRANCH

THE sixth annual meeting of the Montreal Branch of the Canadian Manufacturers' Association was held on July 24th, 1906, in the reading-room of the Montreal Board of Trade, with the chairman, Lieut.-Col. Jeffrey H. Burland, presiding. There were also present: Messrs. C. C. Ballantyne, John J. McGill, S. W. Ewing, Geo. Esplin, Louis Simpson, W. P. Downey, J. E. Shoemaker, Hugh Watson, L. H. Packard, W. T. Castle, Wm. Cauldwell, Jas. B. Campbell, J. W. Hughes, J. J. Travers, Paul Hamill, Jas. R. Kinghorn, F. Wilson Fairman, Frank Pauze, F. P. Miller, Wm. Smaill, H. A. Moulton, Alfred H. Brittain, R. J. Younge, C. W. Davis, E. J. Woodburn, R. N. Tombyll, W. Barrett, J. E. Matthews, Fred Birks, John E. Hulett, Hon. J. D. Rolland, Hon. A. Desjardins, J. F. M. Stewart.

The minutes of the annual meeting of 1905 were taken as read. The secretary then read the report of the Executive Committee.

REPORT OF EXECUTIVE COMMITTEE.

The Committee have carefully watched every measure which might prove hurtful to the members of the Association, and strenuous opposition has been conducted against any which would unduly increase the burden of taxation or prejudice the interests of our manufacturers as employers of labour. Partly as a result of the representations made by the Association the proposed increase in the tax on incorporated companies to 1-5 of 1 per cent. upon the paid-up capital to $1,000,000 was modified to 1-8 of 1 per cent.

The proposed tax of 25 per cent. on all premiums paid to extra-provincial fire insurance companies not licensed to do business in the Province was reduced to practically 1 per cent. as a result of the determined opposition of the Association.

Measures of such a dangerous character as the Workmen's Compensation Bill and the Lafontaine Bill respecting industrial establishments were successfully opposed. So serious was some of this proposed legislation that a general meeting of members was held on March 6th, and the services of a prominent lawyer engaged to watch the Association's interests.

The Quebec tax on non-resident commercial travelers representing foreign businesses, which has so seriously injured the reputation of the Province abroad, was opposed by two delegations from the Montreal Branch. If our efforts were not successful in securing the repeal of the tax, we can at least claim part credit for its modification. As it stands modified, travelers dealing with the wholesale trade pay $50 for a semi-annual license; those dealing with the retail trade, $100; and those dealing with the consumer, $200. One point brought up by our delegations to the Government has resulted in a provision that any commercial traveler taking orders for machinery, plant, tools and supplies for factories when such articles cannot be procured in the Province, shall not be regarded as dealing with consumers, but as selling to the wholesale trade, and pay accordingly $50 instead of $200.

Federal Legislation.

In national affairs the Montreal Executive acted as usual in conjunction with the Executive Council at the head office. A special meeting was held to consider certain features of the Lord's Day Bill, and steps were taken to see that it did not interfere with any rights or privileges now enjoyed by the manufacturers of the country. The importance of the establishment of properly equipped technical schools in the chief industrial centres was not forgotten, and a deputation from the Association waited upon the Government in May, to urge that a Dominion Commission be appointed to report on the best method for establishing a comprehensive national system of technical education to provide Canadian industry and commerce with trained assistants from amongst the Canadian people, and thereby aid in developing Canadian industry and modify the present condition of affairs which compels employers to go abroad for men to occupy the more responsible and more remunerative positions in Canadian enterprises.

Tariff.

The meetings of the Tariff Commission in the fall and winter gave an opportunity for the Association to bring the members of the different trades together and to enable them to unite in the presentation of harmonious requests for changes in the Customs Tariff.

Municipal Affairs.

In civic matters little transpired of special interest to the manufacturers as a class.

Believing that not enough was being done to proclaim abroad Montreal's advantages as a manufacturing and commercial centre, the Executive Committee addressed a letter to the City Council urging action in this important matter. The City Council appointed a special committee, which is now considering the best means to attract manufacturing and other business establishments to the city.

The progress of the Greater Montreal Annexation Scheme must be regarded with favour as a timely step towards the consolidation of the city and immediate suburbs.

Extension of Montreal Branch Limits.

In the past the Montreal Branch has consisted only of members in the city and immediate suburbs. It has now been decided with the approval of the Executive Council to extend the limits of the Branch so as to comprise the area covered by the commutation rates of the different railways running out of Montreal. Accordingly we welcome to our membership the manufacturing establishments in the immediately surrounding towns.

The Montreal Branch.

Your Committee have pleasure in reporting satisfactory progress in the Montreal Branch. The membership in the past eleven months has increased from 368 to 420, of which 13 names were added through the extension of the Branch limits.

Two social events were held; a complimentary banquet to Mr. W. K. George, President of the Canadian Manufacturers' Association in September, at the Canada Club; and a dinner and smoker at the St. George's Club House in March, with the Hon. J. I. Tarte and Mr. G. W. Stephens, M.L.A., as the chief guests.

The Paint and Varnish, and the Gold and Silversmiths' Sections have both had successful years with frequent and well attended meetings.

CHAIRMAN'S ADDRESS

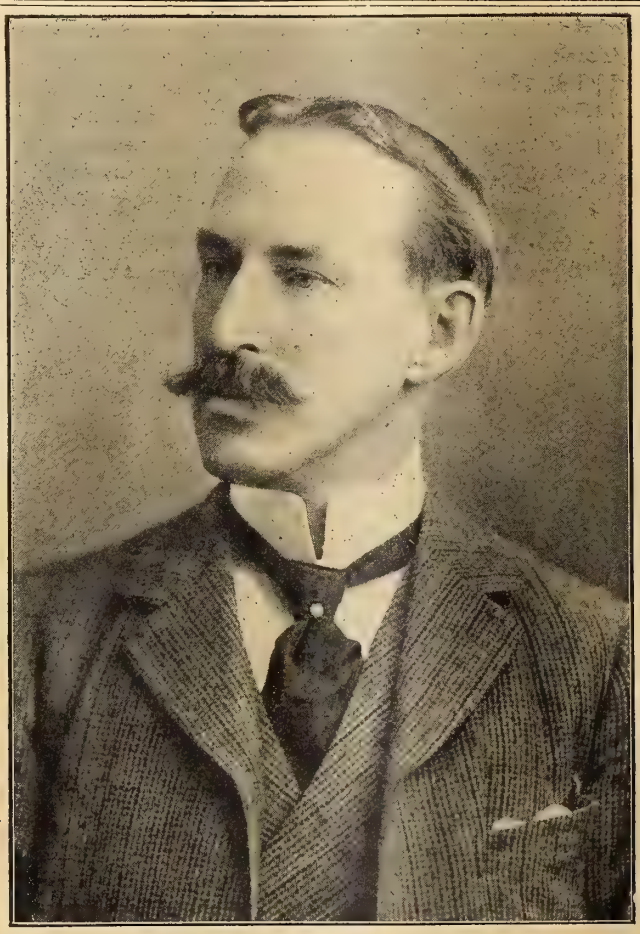
LT.-COL. JEFFREY H. BURLAND DISCUSSES INDUSTRIAL CONDITIONS AND PROSPECTS.

To the Members of the Montreal Branch of the Canadian Manufacturers Association:—

Gentlemen,—The report of the Executive Committee to which you have just listened has given you an epitome of the work performed by your Committee in support and defence of the rights of the organizations of which you form a part.

That such an organization is necessary for the prosperous and successful conduct of our manufacturing interests is amply provided by the results obtained from the work done; not that we as manufacturers desire to infringe upon the rights of others, but rather because we feel entitled to have our own rights respected. We ask no more and hope we are expected to accept no less. But above and beyond all these questions of local and personal interests we hope and work for the development of the great country which claims for itself this new century, and which purposes to make new records in the development of a happy, prosperous and homogeneous people, making of them a great nation in the sisterhood which owes and freely acknowledges allegiance to the one and greatest Crown and King.

That the year which has just been brought to a close affords ample cause for congratulation is proved by the increase of our membership, by the conservative management of our finances, and by the results of the judicious presentation of our views on legislative matters to the proper authorities.



LT.-COL. JEFFREY H. BURLAND,
Chairman, Montreal Branch, 1905-1906.

Montreal's Industrial Progress.

The rapid growth and expansion of this great city, the increase of its population, the establishment of new industries within its sphere of influence, the extraordinary increase in the value of real estate, the tremendous increase in the Bank Clearings, which for the past six months have been 105 millions of dollars in advance of the same period of 1905, are also matters of congratulation, and are evidences that Montreal still maintains its pre-eminent position as the commercial, industrial, and financial centre of Canada. In addition to all these factors which indicate so markedly the progress made during the year, we must not forget those forces which, although working more silently, yet have been accomplishing great things for the education of our people, and for the uplifting of those less fortunate than ourselves, who, in many cases, require only the helping hand to re-establish them in health and earning capacity; we know that whatever brightens and ennobles the lives of these must accrue to the benefit of all.

Betterment of the People.

Montreal has a great and charitable heart, and I can say as one much interested in these matters, that it beats in sympathy with the best in the world. Have we not evidence of progress, and cause for congratulation in these matters, in the erection, equipment and endowment of the great institution for the training of teachers, which owes its birh and existence to Sir William MacDonald; or in the completion of the large contagious diseases hospitals, one in the east end and one in the west end, the latter opened only a few days ago; or again in the work carried on by the Pure Milk League, that endeavors to provide pure milk and proper food for the babies of the city, many of whom, would, without such attention be added to our sad weekly record of infant mortality. Need I call your attention to the work of the Charity Organization Society which has contributed so much to the well-being of many people; or to the Tuberculosis League which has done so much to diffuse a proper understanding of the dread disease, and how best to combat its attacks, limit its incroachments, and effect its cure. These and many other matters of a cognate character may with profit occupy the attention of our Association as affecting our interests individually and collectively, and I would therefore counsel you, whilst keeping view the ends and aims to which as members of this Association you are devoting your energies and capabilities, not to allow yourselves to become so absorbed, as to be insensible to the duties and responsibilities which attend you in these matters; but to keep your horizon broad and your sympathies acute, so that you may assist in the solution of these problems, the burden of every civilized race. In this country, they are still in their infancy, so that solution will be comparatively easy, and will tend greatly to enhance the future happiness and prosperity of our city and its people.

Relations of Employer and Employee.

There is yet another subject that deserves your attention, and which will increase the cordiality between employer and employee, and be a step towards the removal of the exciting causes of some of the conditions I have mentioned.—I refer to the provision of a pension for work people.

The feelings that exist between labor and capital, at the present time, are in many cases, those of suspicion and an-

tagonism; in some cases they may be characterized by even stronger terms. They have grown out of the dim and distant past when the laborer was almost a slave, and the conditions in which he worked were, to say the least, notoriously bad; but the pendulum is now swinging to the other side, and if something be not done to establish an equilibrium, the employer will become the oppressed and the employee the oppressor. This will not mend matters, but will make them rather worse than better.

The Right Hon. John Burns has given a solemn warning with regard to this attitude of labor towards capital.

Pension Funds for Workmen.

It is my belief that if a movement were inaugurated to establish pension funds for employees, who by reason of advancing years, or from other causes, were disabled from working, it would have the tendency to remove some of the difficulties attending the question of wages, hours, and unions, so prominent in many disputes at the present time.

Pension funds are in existence in most of the banks, and some of the large railways, and they work satisfactorily. The employees know that if they serve faithfully and well for a period of years, they will not be left without some means of support when their working days are over. It may be of interest to know here, that the pension scheme proposed by Mr. Chamberlain comprehends the establishment of a voluntary state old age pension institution. Every man is encouraged to make deposits in this institution early in life by the promise, on the part of the state, to add £15 to the account of every one who shall have deposited the sum of £5, by the time he is 25 years of age. The account so started must then be kept alive by the payment of one pound each year for forty years. If the person lives to be 65, he will be entitled to a pension of 5s. per week for the remainder of his life. If he dies before that time, his widow will receive 5s. for 26 weeks with an additional 2s. for each child until 12 years old. If neither widow or children are left, the original £5 will be returned to the deceased's representatives.

It is also interesting to know that Germany, a pioneer in all matters of social reform, and especially fitted by the peculiar genius of its people to lead the way in social experiment, has already inaugurated, tested and proved a general system of workmen's old age pensions, in which are enrolled some eight million men and four million women.

Work for the Association.

Whilst we are not yet prepared to adopt so comprehensive a scheme, it would seem that such an organization as ours which has given its attention to the solution of many difficult problems might well give this one the attention and study to which I think its importance entitles it; and I feel sure that a consideration of the subject would be followed by the formulation of some pension scheme which would prove satisfactory both to the employer and the employee, and would tend to promote more cordial relations between them.

Unfair Law of Seizure.

There is another subject of much interest to the manufacturers and their employees, it is the provision of the Code that gives to a creditor the right to seize the wages of the debtor, and I will here briefly state the points wherein the law may be amended to the advantage of both parties, without putting any serious obstacles in the way of the creditor; or prejudicing his opportunity to recover a just debt.

The hardship, in the case of the employer, is that he must, when the wages of any of his workpeople are seized, appear in court personally or by attorney, to declare what amount, if any, is owing. Relief might be given by an amendment providing that a sworn statement to the same effect be filed in court without personal appearance.

The case of the workman involves more hardship, inasmuch as he must not only appear, but is also taxed for costs that, in many cases, far exceed the original amount of the debt.

The opportunity is now given, in many of these cases, to the less reputable members of the legal fraternity, to impose upon the poor workman by charging fees that are too great altogether, the collection of which is nothing short of robbery. I have had some little experience and may cite one or two cases:—

Examples of Collections.

A workman owed $6.25, (the debt in this case was contracted to assist a fellow-workman); a seizure was taken out and resulted in the poor fellow having to effect a settlement for $22. In another case a debt of 75c. increased to $14; and in yet another case where a man after settling the seizure was asked to pay 10c. for a stamp and refused, further seizures followed for that amount, with the result that he was obliged to pay at least $13. Such cases outrage our sense of justice. Do not misunderstand me. I do not countenance the shirking of liability for debt, or the thriftlessness shown by many of our workpeople who spend their wages during the few days following pay day freely and extravagantly, and then are almost ready for the poor-house before next pay day arrives. Such a condition of affairs is highly reprehensible in these times when workmen are so highly paid for their services. We hear a great deal about the cost of living and the expense of food, but I want to tell you one thing, that I have learned from the best authority on the subject, and it is this, that the best food is the cheapest, and, therefore, if care be taken to learn what it is and to buy it, the cost of living in many households would be very materially reduced without in any way affecting the happiness or health of the parties concerned. But this takes me into another subject of equally great interest, and I must not stray from the previous questions, how to mitigate the evils from which the workman suffers under this law. I believe his burden can be lightened by a further amendment reducing the amount of costs so that they will in no case exceed a reasonable percentage of the amount for which the seizure is made.

Mutual Fire Insurance.

You will be glad to know that during the year considerable progress was made with the collection arrangement, and tabulation of information concerning the workings of Mutual Fire Insurance by the Insurance Department of the Association, and steps have been taken by manufacturers interested in this matter to form Canadian Mutual Insurance Companies so that some of the business now placed outside may be retained for our home companies.

Preference in Japan.

Within the past few days we have learned with pleasure of the extension and enlargement of the Commercial Treaty between the Mother Country and the Empire of Japan, which extends to Canada, many advantages and rights in trading with that country. We hope that these will be utilized to their full extent by the members of our Association and others, and that our trade will thereby become enlarged and our exports increased.

In conclusion, Col. Burland thanked the members of the Association, the Executive Committee, and the secretary for their support during the year.

On motion of Mr. C. C. Ballantyne, seconded by Mr. R. J. Younge, a hearty vote of thanks was passed to Col. Burland for his address and for his services in the chair during the year.

Report on Finances.

Mr. J. S. N. Dougall then presented the report of the Finance Committee, which showed that the expenditure of the Montreal Branch for the past twelve months had been $2,294.67, as against $2,584.63 for the corresponding period of 1905; therefore, although the revenue of the Branch had been increased by the advent of many new members, the expenditure showed a decrease of $289.96.

Mr. Dougall moved the adoption of the report, which was seconded by Mr. Geo. Esplin, and unanimously carried.

Amendment to Constitution.

Mr. R. J. Younge proposed, seconded by J. H. Sherrard, that the Constitution of the Montreal Branch be amended so as to provide that:

"All past presidents of the Association resident in Montreal, and all past chairmen of the Montreal Branch Executive, be ex-officio members of the Montreal Executive Committee." This was carried unanimously.

Col. Burland announced that Mr. J. S. N. Dougall had been elected chairman for the coming year, and Mr. S. W. Ewing, vice-chairman, both by acclamation. Col. Burland then retired from the chair in favor of Mr. Dougall.

New Officers Installed.

Messrs. Dougall and Ewing then thanked the members for the honor of being elected chairman and vice-chairman respectively of the Montreal Branch.

Mr. Dougall, having taken the chair, announced that as there had been twenty-nine nominations for the eighteen seats on the Executive Committee, the result would not be known until the following day. He then appointed Messrs. A. H. Brittain and F. P. Miller scrutineers, to examine and count the ballots.

Mr. John J. McGill pointed out that the extension of the Montreal Branch limits had meant the affiliation of thirteen non-resident members, who should be entitled to representation on the Executive Committee. He accordingly moved, seconded by Mr. C. C. Ballantyne:

"That the Montreal Executive Committee be increased by the addition of non-resident representatives in the proportion of one representative for every ten non-resident members." This was carried unanimously, and, it being in order to nominate two representatives, Messrs. Louis Simpson (Valleyfield) and J. C. Cassavant (St. Hyacinthe) were elected to the Executive Committee.

The nomination of twenty-seven representatives to the Executive Council at Toronto was left in the hands of the Montreal Executive Committee.

The Workmen's Compensation Bill (Archambault), now before the Quebec Legislature, was then taken up and discussed. The secretary explained the outlines of the Bill, after which a general discussion took place, in which Hon. J. D. Rolland, Messrs. C. C. Ballantyne, Louis Simpson, and others took part.

On motion of Hon. J. D. Rolland, seconded by Mr. Louis Simpson, it was unanimously resolved that the newly-elected Executive Committee be requested to appoint a special sub-committee to study the Workmen's Compensation Bill and take every means to oppose it.

Mr. J. F. M. Stewart, General Secretary, was called upon to speak, and in the course of a few remarks referred to the recent important work which had been performed by the Association.

On motion of Hon. J. D. Rolland, seconded by Mr. Wm. Cauldwell, a hearty vote of thanks was passed to the retiring chairman, vice-chairman, secretary and committee for their services during the year.

On motion of Mr. C. W. Davis, the meeting then adjourned to the following day at noon to receive the report of the scrutineers.

Election of Executive.

The adjourned annual meeting of the Montreal Branch, Canadian Manufacturers' Association, was held on July 25th in the Board Room, with the newly-elected chairman, Mr. J. S. N. Dougall presiding.

The report of the scrutineers, Messrs. A. H. Brittain and F. P. Miller, was submitted, showing that the following eighteen nominees had been elected to the Executive Committee: Messrs. Fred Birks, J. H. Birks, S. S. Boxer, Geo. E. Drummond, Geo. Esplin, F. W. Fairman, Robt. Gardner, Chas. B. Gordon, J. R. Kinghorn, Robt. Munro, L. H. Packard, Hon. J. D. Rolland, Geo. W. Sadler, E. F. Sise, Clarence F. Smith, W. T. Whitehead, F. Howard Wilson, R. J. Younge.

By the amendment passed at the annual meeting on the 24th inst., Hon. J. D. Rolland and Messrs. Geo. E. Drummond and Robt. Munro were ex-officio members of the committee. It was decided to leave the filling of these three vacancies for the new committee.

On motion of Col. Burland, a vote of thanks was passed to the scrutineers for their work in counting the ballots; and on motion of Mr. C. C. Ballantyne, a vote of thanks was passed to the Montreai Board of Trade for the use of its reading room for the purpose of the annual meeting.

The meeting then adjourned.

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The market for manufacturers at Fort William is practically unlimited, being the whole Canadian West, and a large part of Eastern Canada, with a population increasing with enormous rapidity, and creating an immediate demand for implements, building material, wire fencing, tools, and every other line of manufactured article.

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There is nothing that is required by the Settlers of the North-West that cannot be manufactured to advantage at Fort William.

W. J. Copp & Sons, formerly of Hamilton, are successfully manufacturing stoves and ranges here. The Canadian Iron and Foundry Co. has located a large factory here for the manufacture of car wheels, cast iron pipes, and other heavy castings, employing about 300 men. A Tool Factory and a Paper Mill will shortly be erected here, and a large Shipbuilding Industry and Graving Dock has purchased a site on the water front in Fort William. The J. I. Case Co. of Racine, Wis., has bought the site for its Canadian works here. The Ogilvie Flour Mills Co. has just completed the building of one of the largest flour mills in Canada at Fort William, and a second flour mill of equal size is now in contemplation at this point. The grain shipments employ not only the immense terminal elevators of the railway companies, but also three independent elevators owned by the large exporting firms of the West.

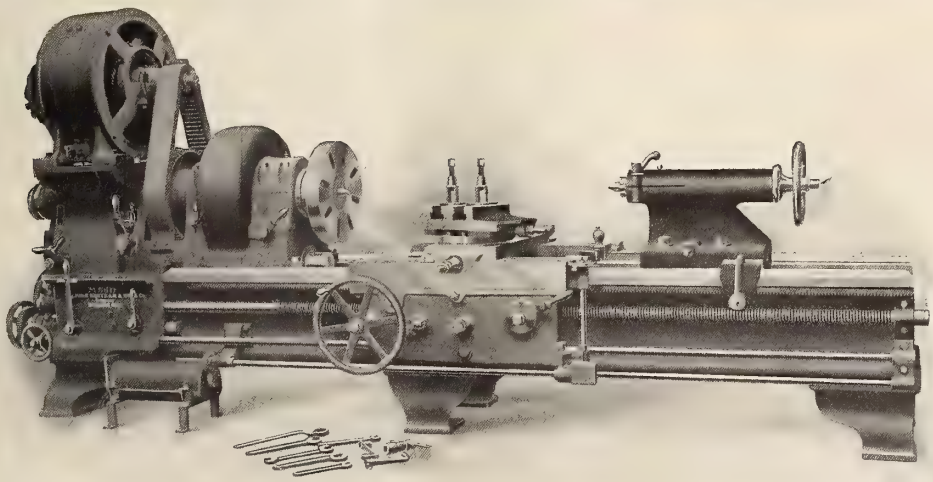
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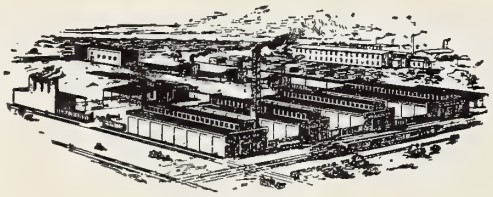
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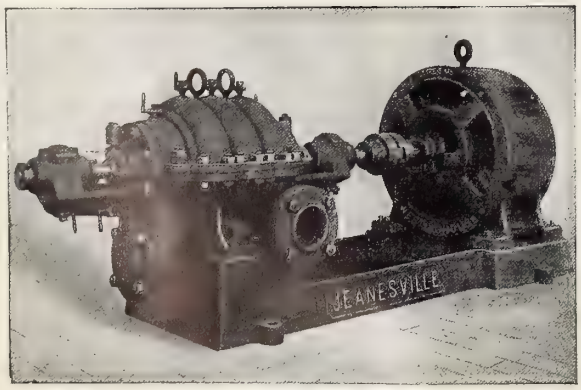


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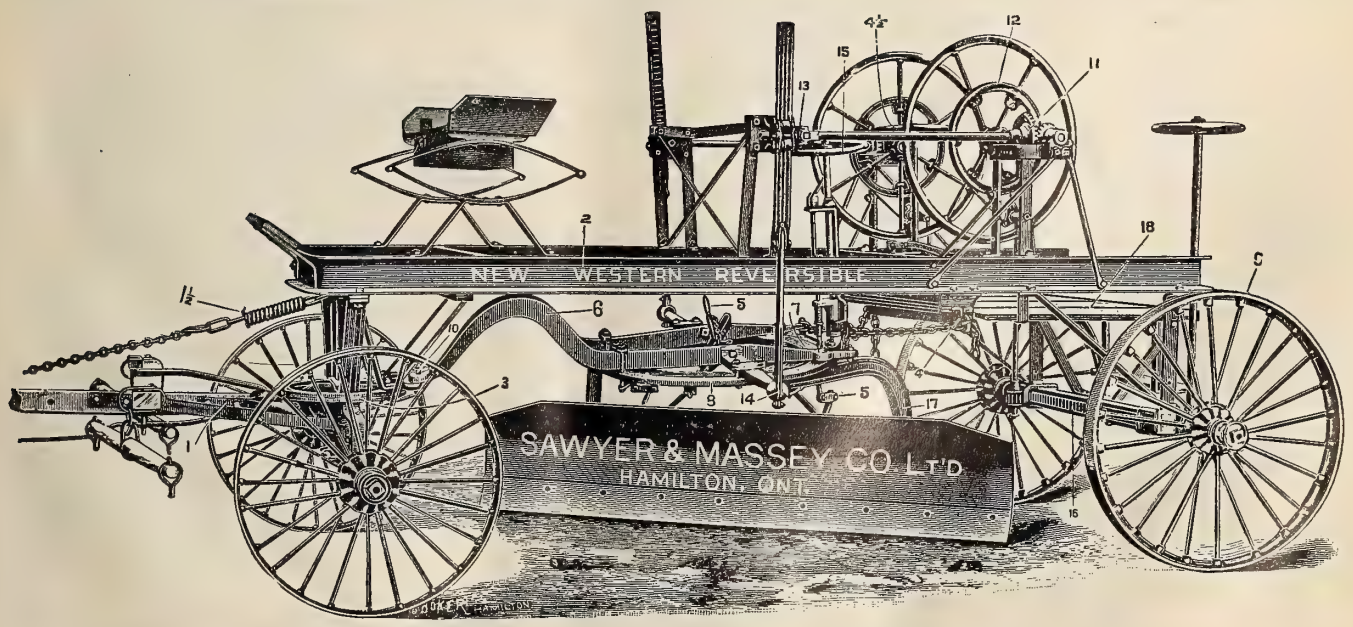
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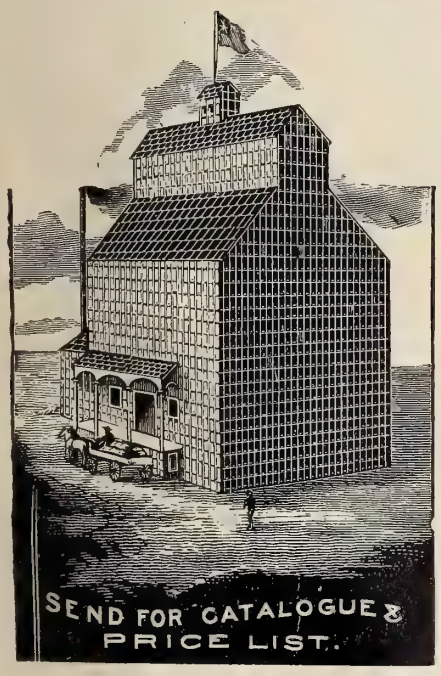
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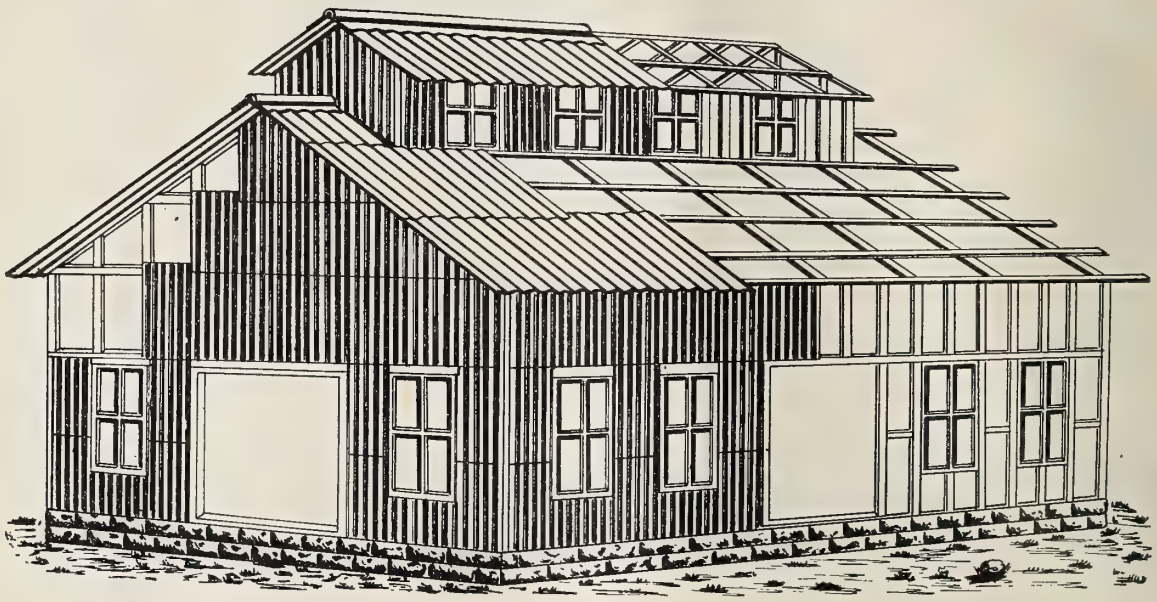
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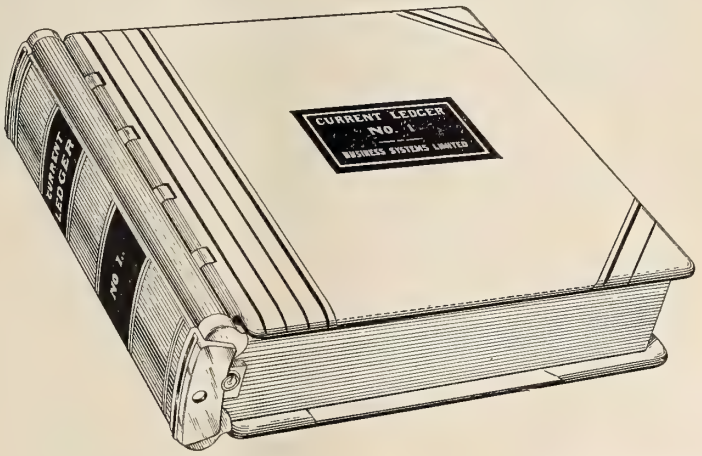
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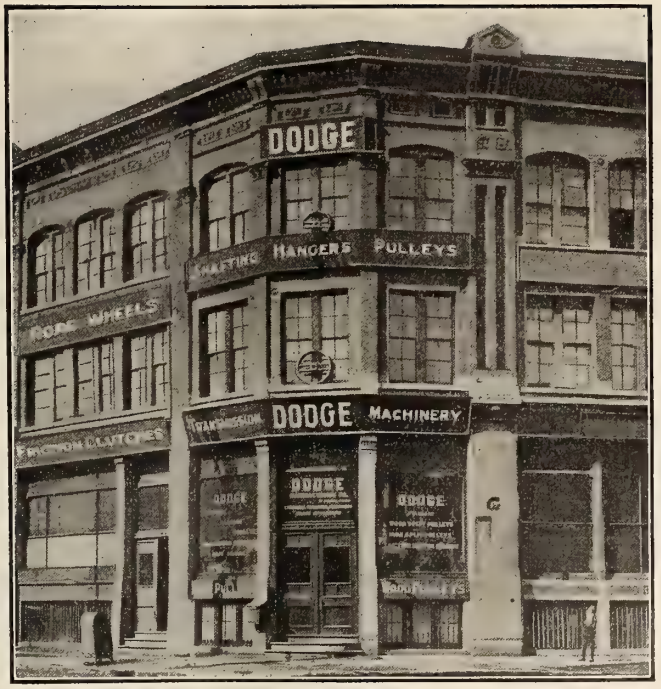
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W. J. Copp & Sons, formerly of Hamilton, are successfully manufacturing stoves and ranges here. The Canadian Iron and Foundry Co. has located a large factory here for the manufacture of car wheels, cast iron pipes, and other heavy castings, employing about 300 men. A Tool Factory and a Paper Mill will shortly be erected here, and a large Shipbuilding Industry and Graving Dock has purchased a site on the water front in Fort William. The J. I. Case Co. of Racine, Wis., has bought the site for its Canadian works here. The Ogilvie Flour Mills Co. has just completed the building of one of the largest flour mills in Canada at Fort William, and a second flour mill of equal size is now in contemplation at this point. The grain shipments employ not only the immense terminal elevators of the railway companies, but also three independent elevators owned by the large exporting firms of the West.

NOW IS THE TIME TO LOCATE IN FORT WILLIAM, AND SHARE IN THE RAPIDLY INCREASING PROSPERTY OF THE CANADIAN WEST.

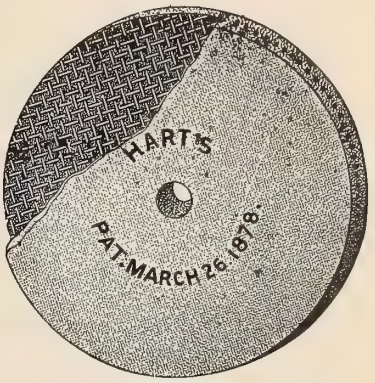
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BOARD OF TRADE FORT WILLIAM

HART CORUNDUM WHEEL CO.

LIMITED

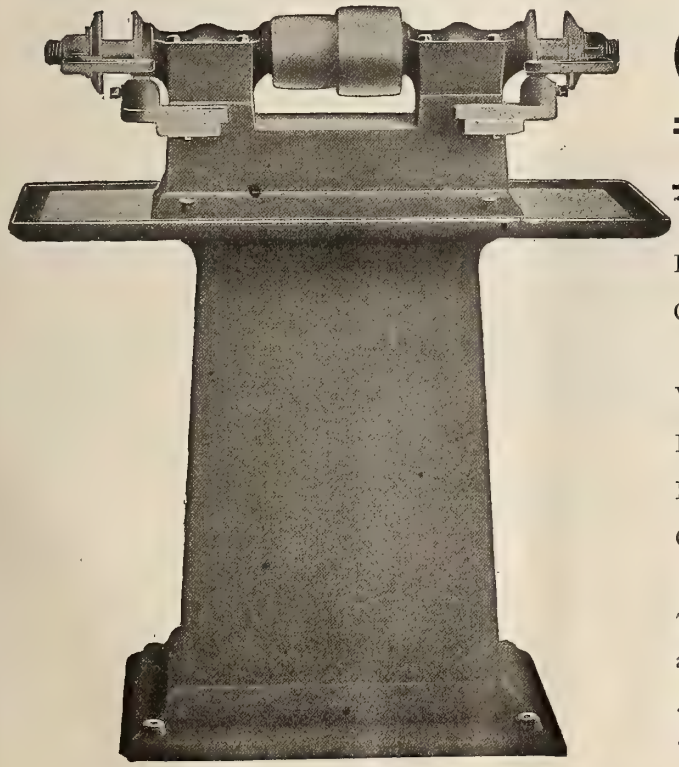
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Will carry two wheels, 12 x 3 inches.

Bearings absolutely Dust Proof.

Fitted with Automatic Oilers.

Countershaft has Cone Pulley, 12 and 13 x 3½ inches.

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ISSUED BY

The Canadian Manufacturers' Association,

Incorporated.

"There be three things which make a nation great and prosperous: A fertile soil, busy workshops, and easy conveyance for man and goods from place to place."—Bacon.

Vol. VII. TORONTO, SEPTEMBER, 1906. No. 2.

INDUSTRIAL CANADA

Issued monthly as the the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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THE TARIFF SESSION OF PARLIAMENT.

FOR some years past the manufacturers of Canada have been endeavoring to take the tariff question completely out of politics. Liberals and Conservatives have worked harmoniously together in the Association in the hope that the principle of thorough protection for all Canadian industries would become the settled policy of Canada, no matter which political party might be in power. The coming session of Parliament will show whether their hopes are to be realized or not. There is good reason to believe that the Government will carry out the promises repeatedly made to manufacturers throughout the country. It is true that the free trade newspapers think it good policy to continually attack Canadian manufacturers and the policy they advocate, but it should be noted that the editorials published in these newspapers immediately before previous changes in the tariff altogether misrepresented the policy of the Liberal Government. What reader of those newspapers could have imagined beforehand that the Laurier Government would introduce a measure as avowedly protective as the "Dumping Clause?" This provision of the tariff, while very defective in many respects, was undoubtedly adopted for the distinct purpose of giving better protection to Canadian manufacturers, although free trade newspapers had declared again and again that the Government would not listen to the request of the manufacturers for more protection. The duty imposed on steel rails is a good example of the Government's desire to give protection to Canadian industries altogether regardless of the editorials in free trade newspapers. Such changes in the tariff have encouraged members of the Canadian Manufacurers' Association to believe that the Government will adopt the same principle in the revision of the tariff which is to take place during the session beginning next November.

Did the adoption of the protective measures referred to meet with any popular disapproval? Not the slightest. These measures were received with approval by the very newspapers that so persistently opposed any concession to protectionist sentiment. If the Government carries out the same policy all along the line it will win the good-will of hundreds of thousands of men who are dependent upon manufacturing industries for a livelihood, and not one of the Liberal newspapers will go into Opposition in consequence.

The members of the Government realize better than do the free trade editors how many interests are anxiously looking forward to increased protection. They realize that if the policy advocated by those editors were carried out not only the whole strength of the Canadian Manufacturers' Association, but all the banking and other financial interests of the country, would be aroused into active hostility to the Liberal party. They know that they will not lose a single vote by doing justice to the industrial interests of Canada, while they are certain to lose many thousands of votes if they fail to respond to the demand for a general increase in the tariff.

THE PROBLEM OF CHEAP FUEL AND POWER.

IF alcohol can be produced in the United States for twenty-five cents a gallon or less it should be possible to produce it in Canada just as cheaply. We have the grain in abundance from which it is made. We have all the facilities for manufacturing it. Yet at the present time the price for denatured alcohol, or methylated spirits, which is the only way in which it can be bought for manufacturing uses without being subjected to the heavy inland revenue tax, is 90 cents and $1.25 per gallon, according to the amount of pure alcohol in the mixture. So long as it remains at this price it is useless to consider it in the light of a substitute for gasoline or coal oil.

Two difficulties must be cleared away by the Government before the price can be brought down to a figure which will make it of commercial importance. The one consists of the method of denaturing. Some cheap denaturing agent must be secured. At present the grain alcohol is made undrinkable by a mixture of a considerable quantity of wood alcohol, which costs the Government $1.29 per gallon. Until something is provided at a lower price than this there can be no cheap alcohol.

The second point is the reduction in the price of the grain alcohol itself. At present the Government buys it from the distillers at 49 cents a gallon. The restrictions placed on the manufacture of it, Government inspection, and license fees, together with the fact that there are comparatively few engaged in its manufacture, contribute to the cost of production. There is nothing in the raw material or the process of manufacture to necessitate such a price. In the Canadian West they estimate that alcohol can be produced for twenty-five cents a gallon. In arriving at a figure it must be considered that much grain which is damaged or unsaleable for ordinary use may be utilized in the distillation of alcohol.

The recent reduction by the Canadian Government of 20 per cent. in the price of methylated spirits, shows that they are alive to the importance of the question. To those manufacturers, such as varnish makers, who use alcohol as a necessary element in their products, this reduction will be of marked value. However, for the production of motive power and light it is still impossible. No doubt the investigations which resulted in the lowering of the price on August 1st will be still further pursued by the Inland Revenue Department. However, a few cents' reduction will be of no benefit as far as its general use is concerned. If it is to compete with gasoline for developing motive power or with coal oil as an illuminant, it must be procurable at a maximum of twenty-five cents a gallon. This must be the goal. It is to be hoped that such improvements will be made in the manufacture and denaturing as will make such a price possible.

COMPULSORY INSPECTION OF HIDES.

AT the next session of Parliament a bill will probably be introduced on behalf of the Ontario and Quebec tanners to make the inspection of green hides compulsory.

The present system of optional inspection has been tried and found wanting. Those who secured its adoption were hopeful that it would be taken advantage of by honest butchers and hide dealers in sufficient numbers to raise the trade to a higher level of commercial morality, but their expectations have not been realized. The services of the inspectors have been allowed to go begging. It has not paid the dealers to use them. It costs money to have hides inspected, and the man who offers the uninspected article for sale knows that he can usually get as good if not a better price for it than the man whose hide bears the official tag. If it has not been properly fleshed, if the hoofs and tail have not been trimmed off, or if the hair is matted with dirt, he knows that the inspector will make liberal deductions from the gross weight. If it has been slashed, he knows that this defect cannot escape the watchful eye of the official. If it is of inferior quality, it will likewise be detected in the examining warehouse. What need, therefore, to run so many chances when the tanners are eagerly bidding, one against another, for whatever is offering? The demand for hides is so far in excess of the supply that it really doesn't pay the butcher to be honest. Indeed, there is every inducement for him to be dishonest, for experience has shown him that weighted hides can be passed off all too readily at their face value.

But the butcher and the dealer are not the only ones who are tempted from the straight and narrow path under this optional system. The inspector, who is paid by fees, knows that if he performs his duties conscientiously he will be deprived of all work. The butcher, whose hides he has docked five per cent. for trimmings and dirt, does not hesitate to say that if he is to be accorded such treatment he will have no more hides inspected—he will sell without inspection. The tanner, on the other hand, who finds he has bought slashed and weighted hides bearing an inspection tag, immediately threatens to report the inspector for collusion and dishonesty. In other words, the inspector is constantly between the devil and the deep sea.

Compulsory inspection would inflict no hardships and would confer great benefits. It would facilitate the transaction of long-distance business at home, and would build up the reputation of Canadian hides abroad. It would be a long step towards the creation of recognized standards in the hide and leather business, and any such move, no matter what the line of trade, is worthy of encouragement, for it works for the simplification of business and the promotion of fair dealing.

THE PREFERENTIAL TARIFF QUESTION.

REFERRING to Mr. Watson Griffin's article on the tariff policy of the Canadian Manufacturers' Association in the August number of the "North American Review" the Toronto "Globe" says:

> "Mr. Griffin's object is to argue that the Canadian manufacturers are not antagonistic to the British preference. He might as well admit that the object of the Canadian manufacturers is to exclude British goods. If that is accomplished they would be willing and eager to have a still higher tariff on other goods, thus giving the British producers the semblance of a preference. This is set forth in the resolution, quoted by Mr. Griffin, that "under any conditions the minimum tariff must afford 'adequate' protection to Canadian producers." "Adequate" means equal to some specific requirement. As the requirement or purpose to which the tariff must be adequate is not stated, the word has no meaning in the connection in which it is used. . . . According to Mr. Griffin, the policy of the Manufacturers' Association is, "not to abolish the British preference, or even reduce the percentage of preference, but to raise the general tariff so high that, when the preference is allowed, the minimum tariff will be high enough to offset the greater cost of labor and the higher rates of interest."

Is not the "Globe's" statement somewhat contradictory? It says that the requirement for which the tariff must be adequate is not stated, and immediately afterward declares that it is stated that the requirement is that the minimum tariff shall be high enough to offset the greater cost of labor and the higher rates of interest.

The "Globe" insists that Canadian manufacturers desire to exclude all British goods in spite of the repeated declarations of the leaders of the Association that they do not desire a prohibitive tariff against British manufacturers. Why is

the "Globe" so anxious to prove that the policy of the Canadian Manufacturers' Association is to absolutely exclude British goods in spite of the clear statement of policy of Mr. W. K. McNaught, for many years chairman of the Tariff Committee; in spite of the speeches of those who have held the office of President of the Association for the last five years, Mr. Robert Munro, Mr. Cyrus Birge, Mr. George E. Drummond, Mr. W. K. George, Mr. C. C. Ballantyne; in spite of the official memorial presented by the Association to the Tariff Commission? Is not this persistent attempt to misrepresent the policy of the manufacturers an admission that the real policy as expressed in resolutions of the Association and the speeches of its leaders would commend itself to the common sense of the Canadian people?

There is no mystery about the tariff policy of the Association. We hold that it is the duty of the Government to promote by tariff protection the establishment in Canada of every kind of industry which can be advantageously carried on at the present stage of development of the country. We believe that so far as possible the wants of the Canadian people should be supplied by Canadian manufacturers, but when it is necessary to go outside of Canada to get what we require we should buy from our fellow-citizens in the British Isles in preference to foreigners. The contention of the Canadian manufacturers is that it will be an easy matter to so revise the tariff as to divert into British channels a great deal of trade that now goes to foreign countries, and we hope that this is what the Canadian Government will endeavor to accomplish at the coming session of Parliament.

DISCRIMINATION MUST CEASE.

THE discrimination in freight rates on east-bound traffic from Western Ontario, referred to in our July issue, appears to be nearing an adjustment. A memorandum, issued by the Railway Commission to the Canadian Freight Association, amply sustains the shippers in their complaints against the excessive rates exacted on east-bound shipments from Ontario points over those charged for the longer hauls to the same destination from United States points. The memorandum, after calling attention to the necessity for modification of the rates in order to meet the requirements of the long and short haul clause of the Act, states that the railways will be given ninety days in which to submit a plan for readjustment of their rate schedules. The rate tariffs from points in the United States into Canada have already been arranged to meet the requirements of the Interstate Commerce law, and it only now remains for our railways to place rates from Ontario shipping points on a proportionate basis to remove the whole difficulty. Clearly, this is what the Commission expects the railways to do.

In arranging new schedules an opportunity will be afforded our railways to remove another long-standing grievance in Ontario. Not only are the east-bound rates out of all proportion to rates from United States shipping centres, but the rates east-bound from Ontario are uniformly higher on all merchandise traffic than for the same service in the opposite direction. If the railways are disposed to deal fairly with the shipping public with respect to these grievances they will use this opportunity of revising the rates in their east-bound schedules so as to put them upon an equality with rates for merchandise traffic handled in the west-bound direction.

It has been stated in the daily press that an attempt might be made to induce American railway lines to increase rates from the United States into Canada so as to remove the discrimination and avoid the necessity for reducing rates from Ontario stations. It seems incredible that such a subterfuge should be resorted to by our railway managers. Common justice demands that they make their rate tariffs conform to the spirit of the Railway Act. But should the present law prove insufficient to correct the mischief which caused its passage the people will not be slow in demanding a more effective remedy.

AN ADDITION TO TRADE REPORTS.

THE weekly bulletins issued by the Department of Trade and Commerce, Ottawa, are doing good service to Canadian export trade. Our Commercial Agents now cover most countries with which we do business. Their reports are extremely valuable in giving general trade conditions, criticisms of goods coming from Canada, advice for the improvement of packing, shipping, etc., and useful information regarding markets. In all these respects they are altogether admirable.

There is one way, however, in which they might be made still more valuable to Canadian exporters. Exhaustive reports from time to time on specified topics of commercial interest would be of real assistance. As examples of this kind of work the consular reports, issued by the United States Government, are worthy of attention. Every few days some particular article of manufacture is treated of from every standpoint. This is made possible in the case of the United States by reason of the great number of agents they have, distributed all over the world. One, who is located near the source of the raw material, will gather up all statistics about the cost, growth, labor, etc., connected with it. Another will deal with the subject in another stage of its industrial progress. Where similar work is carried on in a number of districts reports are received from all, and a comparison of methods and costs becomes possible.

The advantages of these reports are apparent. Where the same industry is carried on in the United States, manufacturers at home become acquainted with the nature of their competition, get valuable pointers on new methods, and are in a better position to enter new markets intelligently. Where the products investigated are not already made in the country, the information is of use to those who may consider establishing such an industry. Accordingly, complete information on individual items is gradually being accumulated for the benefit of the United States public.

The addition of reports like these to our bulletins from time to time would materially aid Canadian business men. The work could not be carried out elaborately at first. The comparative fewness of our Trade Consuls, and the many calls on their time, limit their activities along these lines. A beginning, however, could be made, and the work so done would be especially valuable as being confined to the countries in which most of our interests are centred. Commercial representatives are peculiarly well situated to carry on such investigations. Their regular work brings them into contact with all classes of business men. Thus they are enabled to get familiar with the resources and industries of the countries in which they are located. In making this suggestion for improvement INDUSTRIAL CANADA fully appreciates the excellent work already being done by these commercial reports.

AMERICAN SETTLERS PROTECTIONISTS.

George H. Locke, an expert agriculturist, who has visited the Canadian West in the interest of "The New York Farming," states that the great majority of the Americans who are settling in the Canadian West are protectionists. That Mr. Locke is right cannot be doubted by anyone who has talked with a large number of these settlers. It is not at all surprising that this is the case. They have seen the development of great manufacturing industries in the American West as a result of protection. They know how greatly these industries benefited the farming community in those States, and they very naturally desire to bring about the same development in the new country where they have decided to make their homes.

EDITORIAL NOTES.

Whatever the decision about the Labrador boundary may be, it is satisfactory to know that the territory will remain under the old flag.

Immigrants to Canada for the twelve months ending June 30, 1906, numbered 189,065. This was an increase of 42,798 over 1905. So long as the home market increases at this rate Canadian manufacturers need not worry about an export trade. The foreign consumers are coming to us.

The next session of Parliament promises much. The result of the cogitation of the Tariff Commission will then be made known. Will they adjust the tariff so that all industries will feel the benefit of the present era of prosperity? Farmers as well as artizans welcome the time of busy manufacturing activities.

A decision has been announced by the Railway Commission in the complaint brought by the William Davies Company, Limited, against the Canadian Pacific and Grand Trunk Railways of an advance in rate from Toronto to Montreal on packing house products for export. The rate was recently advanced to 19 cents per 100 pounds. The Commission orders this reduced to 18 cents per 100 pounds. The railways are also ordered to make the 18 cent rate applicable on shipments from Hamilton and Brantford, and relative rates are given from the other manufacturing points in Ontario.

Considerable effort has been made to develop trade between Canada and Demarara, British Guiana. The success of such efforts depends on the possibility of a mutual trade being established. At present a boat leaves Halifax every twelve days and makes the trip to Demarara in fourteen or fifteen days. This is equal to the service from New York. Unfortunately the return trip takes twenty and twenty-one days, which effectually stops business in that direction. It is necessary to have the return trip reduced to fifteen days, in which case an active trade could be established between the two colonies.

In conformity with the legislation passed at the last session of the Ontario Legislature, the Metropolitan Railway has been compelled to reduce its passenger tariff to two cents a mile. To offset this the company is reported to have withdrawn all special excursion rates. This policy is likely to act in reverse of that which is intended. The special rates were not granted out of consideration for the public, but because they would develop additional business for the company. The withdrawal of the privileges may cause some inconvenience to the public. It can hardly work any benefit to the railroad.

The hospitality extended by the municipalities of the West to the members of the Canadian Manufacturers' Association on their last trip to the coast bids fair to be exceeded on the present excursion. The invitations, printed elsewhere in this issue, show a wholeheartedness which ensures the delegates a thoroughly enjoyable time. The newspapers in all the towns on the itinerary are equally enthusiastic, and they report that preparations are being made in every case to give the manufacturers a royal welcome. The Association would, indeed, be lacking in feeling if it did not appreciate highly these expressions of good-will. Those who will be unable to attend will join with their more fortunate associates in returning thanks for these courtesies.

Copper has arisen to a position of great importance in recent years on account of its value in electrical transmission. Efforts to find a substitute for copper in electrical work have met with little success, owing to its remarkable conductivity, aluminum being the only similar medium thus far discovered, and its price and output threaten no competition with copper. It is extremely doubtful whether such phenomenal strides in electrical development, particularly as to the network of trolley lines, could have taken place on this continent had it not possessed the richest deposits of copper in the world. Nor is there any evidence that consumption will decrease; on the contrary, many of the leading steam railroads are arranging for the electrification of suburban divisions, which will add another element of consumption that cannot be measured, but is obviously of vast importance.

"The Monetary Times," in its issue of August 17th, thus comments on the cabled reports of a letter contributed by a former Canadian newspaper man to an English journal.

> "Unless the cable is a verbal contortionist, Mr. "Ned" Farrar, the widely-known journalist, of Ottawa, has made a grievous charge against the Canadian Manufacturers' Association. Writing to the "Tribune," a juvenile Liberal Free Trade organ in London, he says that if the naked question of protection versus free trade were submitted to the Western Canadians the result would be overwhelmingly for free trade; provided the Manufacturers' Association could be stopped from contributing to a bribery fund to be employed among the poorer classes of settlers. This surely is a gross misrepresentation, so wide of the mark that the Association is not likely to recognize it officially. Mr. Farrar is also good enough to suggest that all the Canadians who know anything believe that the Chamberlain dream of placing the Empire on a protectionist basis is about over. This would be serious if it were accurate. Not being accurate, it is amusing—which is very much better, in mid-August."

"The Monetary Times" estimates the foolish statements of Mr. Farrar at their proper value.

UNFAIR CONDITIONS IN BILLS OF LADING

Rightful Responsibilities Shirked by Railways through Special Conditions in Shipping Bills.

Unfair Conditions in Bills of Lading.

The position of railways with respect to property damaged by fire while in their possession seems to be a fertile source of misunderstanding on the part of the shipping public. Many shippers believe that railway companies are bound to deliver safely property which they accept for transportation. If goods are lost they think the railways must compensate the owners, regardless of what may be said in the "terms and conditions" of the shipping bill, which has to be signed before the goods will be taken. But should they chance to have a lot of goods consumed by fire while in the possession of a railway, such shippers learn to their sorrow that the railway does not contract or assume responsibility for the safe delivery of property.

Insurers of Goods Under Common Law.

Under what is known as common law, railways and other carriers are held to be insurers of property, and, therefore, they can be held accountable for losses arising from fire unless it be caused by lightning or the result of combustion or some other cause included in the terms, "the act of God" and "inherent vice." There is nothing, however, to prevent carriers from entering into special contracts with shippers under the terms of which they are relieved of this liability. The law does go so far as to prevent railways from contracting against liability for loss or injury resulting from negligence and omission, but where special contracts are entered into, restricting liability for loss or injury from whatever other cause they are strictly enforceable under the law.

Special Conditions Limit Responsibility.

The shipping bills and other contracts for carriage in use on our railways are invariably prepared in the shape of special contracts, and contain conditions which are framed so as to relieve the railways from all liability which they can possibly escape without infringing the statute. Among other conditions is one which states that "the company is not to be liable for damages occasioned by . . . fire." When the sender of freight, by signing the form of special contract consents to this condition, he assumes on account of the owner of the property the risk of destruction by fire while in the possession of the railway. This question has been ruled upon by our courts, notably in the Hull fire disaster, where a large amount of property was consumed in the railway premises. The condition of the bill of lading was held to be sufficient to exempt the railway from liability for damage occasioned by fire arising otherwise than from negligence or omission by the company or its servants.

Will Not Issue Simple Bills of Lading.

The position of shippers appears to be particularly unfortunate, because, notwithstanding that the railway companies are charging their full lawful tolls and ought to be made to assume the responsibilities which attach to the calling of common carriers, it is impossible for a shipper to secure the transportation of his goods unless he becomes a party to a special contract under which the liability of the railway companies is restricted in every conceivable way. There is no such thing as an ordinary bill of lading in use in Canada; all traffic is handled under special contracts, framed by the carriers in their own interests, and were a shipper to decline to become a party to such contract he would find it impossible to secure the transportation of his goods.

In England, while railways are allowed to make special contracts, the statute distinctly provides that the conditions imposed upon the public by such contracts must be just and reasonable; and there are cases where a condition absolving a railway from responsibility for loss of goods by fire has been held by the courts to be unreasonable.

Shippers Not Protected.

The Canadian law has never afforded such protection to shippers, and the absence of any regulating statute has resulted in the railways imposing special conditions for their own benefit without let or hindrance. The Railway Act now includes a provision that contracts restricting or limiting liability must be authorized and approved by the Railway Commission, and the extent to which railways may restrict their liability is to be determined by the Commission. It is understood that railway traffic forms will shortly be subject to revision, when it is expected that conditions such as that relieving railways from liability for destruction of goods by fire will be prohibited.

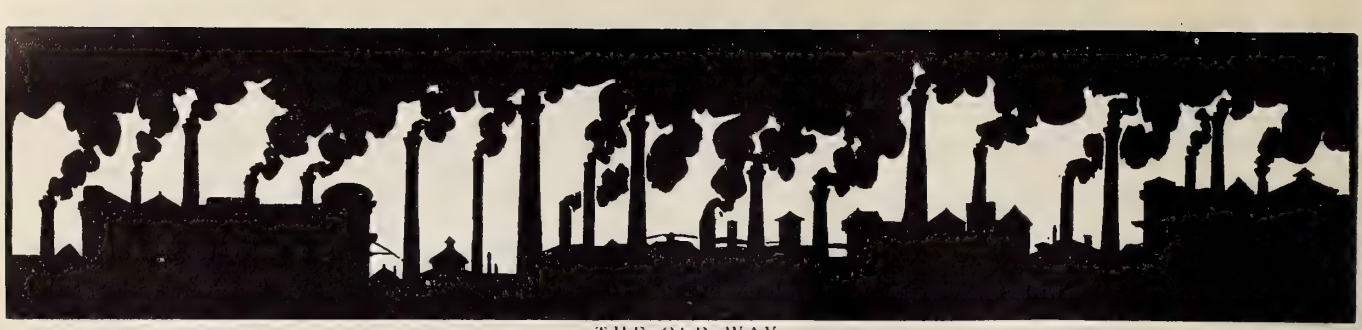
Special Conditions Should be Eliminated.

It is the duty of the Commission in the public interest to require the elimination of all conditions which are not absolutely just and reasonable. There are many such in the railway bills of lading, which have been imposed upon the public for years past, and which should now be done away with. It is only right that railways should be made to assume their common law responsibilities as insurers of property. They are eminently qualified to do this, knowing as they do the various risks to which they propose to subject the property while in their care. On the other hand, the owner is not in a position to provide for the safety of his goods himself, and must perforce rely upon the carrier to perform faithfully his trust and see to their safe delivery. It should be the aim of the Railway Commission to provide a simple form of contract between shipper and carrier which will, in addition to being a receipt for the property, be an undertaking to carry safely to the point of destination without any restrictions as to liability except those permitted by the common law.

Investigate Clay Deposits.

Cheaper building materials are of increasing importance as the cities and towns become more densely populated. British Columbia has felt the need of greater knowledge on the subject and has decided upon an exhaustive investigation of the clays of the Province. Fire clay and gypsum have been discovered in a number of places. Fuller information on the quality and extent of the deposits are now being sought. The manufacture of brick and terra cotta has become of considerable importance in some parts of the country, particularly in Victoria.

The Provincial Assayer will devote a large portion of his time during the present season to this investigation. In addition to work on the mainland the West coast of Vancouver Island will be examined, and a report will be made on mineral prospects and the progress of mining.



THE OLD WAY

FIGHTING THE SMOKE NUISANCE

Smoke Inspectors, Stoker Manufacturers and Owners of Steam Plants all have Troubles of their Own. An International Association to Work in the Cause of Smoke Abatement.

THE study of smoke abatement along scientific and economic lines dates its origin from the discovery of the steam engine. Ever since Watt designed his first model in 1785 the best inventive geniuses in the world have been endeavoring to solve the problem of a smokeless furnace. They are still at it. Thousands have failed altogether. Some have achieved partial success. But despite what interested parties may say, the universal smoke-consuming device is still a thing of the future.

The reason why so much attention should be given to the subject is not far to seek. Smoke means money, and the manufacturer knows it. The foul gases flying from his chimney in dark clouds represent anywhere from 10 to 15 per cent. of his coal bill. If his plant is a small one the financial loss may be insignificant. If his business is expanding and he has to enlarge his boiler capacity, it becomes increasingly important for him to economize on fuel. By the time he has a big plant it is absolutely necessary for him to do so. And just so soon as he has successfully installed a smoke-consuming device and reduced his cost of production, every other manufacturer in the same line feels himself compelled to do the same. The incentive, therefore, to make use of such devices is an ever-present one with manufacturers.

Of recent years considerations of public health and public cleanliness have led to the enactment of smoke ordinances in most of the large industrial centres of America. Penalties are provided, varying all the way from a small fine to imprisonment. In some places over-officious officials have been entrusted with the enforcement of these by-laws, so that owners of steam plants now find themselves prodded with a new goad to drive them into the arms of those who have devices for sale.

But it is one thing to say to a man, "You must abate your smoke," and another thing to make him do so. Manufacturers who have made an honest endeavor to comply with the requirements of the law realize this. Inspectors whose duty it is to see that the law is complied with also realize it. And it was with a view to talking over this peculiar situation and discussing the advantages and disadvantages of education and coercion as applied to the administration of smoke ordinances that the first international convention of smoke inspectors was held recently in Detroit.

At this convention a permanent organization was formed, known as the International Association for the Prevention of Smoke. It will hold annual meetings for the general interchange of ideas and for furthering the work of smoke abatement. Membership, which is open to all interested, is divided into active and associate. Active membership is restricted to civic officials who are engaged in the administration of smoke by-laws; associate membership is open to stoker manufacturers, owners of steam plants, or any others who may care to join.

Being the first convention of the kind ever held, the sessions resolved themselves for the most part into "experience" meetings, where the different inspectors told informally of the difficulties they were meeting with in endeavoring to secure an abatement of the smoke nuisance.

Local by-laws in themselves do not appear to differ very materially. Toronto's is about as sane as any, and may be taken as a typical example. It reads as follows:

Toronto's Smoke By-law.

"The Municipal Council of the Corporation of the City of Toronto enacts as follows:

I.—All manufacturers and others in the City of Toronto using combustible material to produce heat or power, and thereby creating smoke in such quantities as to foul the atmosphere, or that may be carried by the wind or otherwise to other shops, houses or premises, to the inconvenience or injury of the neighboring premises or residents therein, shall have such chimney or other apparatus as shall consume the smoke, or prevent the same from fouling the atmosphere, or being carried by the wind or otherwise to other shops, houses or premises, to the inconvenience or injury of the neighboring premises or residents therein.

II.—Any person convicted of a breach of any of the provisions of this by-law shall forfeit and pay, at the discretion of the convicting magistrate, a penalty not exceeding (exclusive of costs) the sum of fifty dollars for each offence, and in default of payment of the said penalty and costs forthwith, the said penalty and costs, or costs only, may be levied by distress and sale of the goods and chattels of the offender; and in case of there being no distress found out of which such penalty can be levied, the convicting magistrate may commit the offender to the common goal of the city of Toronto, with or without hard labor, for any period not exceeding six calendar months, unless the said penalty and costs (if any), including the costs of the said distress and of the committal and conveyance of the offender to the said gaol, are sooner paid."

Until a short time ago the Chicago ordinance called for three violations of the law and three notices thereof in ten days before prosecution could take place. Under these conditions it was found extremely difficult to secure a conviction. The present law in Chicago permits of action being taken on the first offence. Some cities have declared a violation of the law a criminal offence, punishable by fine or imprisonment; e.g., in Cleveland, where the manager of the Standard Oil Co. had a narrow escape from being committed to the common gaol. In the majority of places it is punishable simply by fine.

These, however, are matters of detail, which can be readily adjusted to meet local opinion. What is of more importance is to know to what extent smoke by-laws are being enforced, and which policy is proving the more successful, that of rigid enforcement, or that of education and persuasion. Chicago may be taken as a typical example of the city that is committed to the policy of rigid enforcement. It only adopted this policy on the first of February last, notwithstanding the fact that it has had a smoke ordinance in effect for the past thirty years. For a long time it worked along purely educative lines, with varying success. Three years ago it commenced a mild enforcement of the by-law, which apparently brought into line all except the deliberate offenders. These were then declared war upon, and during the past five months over 1,700 suits have been entered, and fines collected aggregating $7,000. The campaign is being directed not only against manufacturers, but also against railway and navigation companies. Steamboats are being compelled to burn hard coal or coke. Locomotive crews have been summoned scores of times and fined, and, according to Inspector Schubert, "the city will continue to get after them until the nuisance is abated."



BY COURTESY OF THE UNDERFEED STOKER CO. OF AMERICA

First International Convention of Smoke Inspectors, Detroit, June 27-29, 1906.

In considering Chicago's position on the smoke question it must be borne in mind that it is a big city, one of the largest in the United States. It already has more factories than it knows what to do with. Its population is very dense, and considerations of public health make it highly important that the air be cleansed of all impurities which can be overcome by the exercise of ordinary care. Its citizens are indifferent on the question of further industrial expansion. As Inspector Schubert himself remarked: "They cared very little if the enforcement of the by-law did drive some of their factories to other cities—they still had plenty left. Public sentiment and the press both supported the present policy, and it would be pursued to the bitter end."

Cleveland, too, may be said to be committed to the policy of rigid enforcement, as evidenced by the fact that a violation of the by-law was recently declared a criminal offence. In Inspector Krause, however, it has an efficient officer, who is at the same time fair-minded, and, while prosecutions are frequent, a reasonable time is always allowed the offender to consider the various devices on the market and install what seems best suited to his plant.

Detroit and Milwaukee furnish examples of the city whose policy is to educate rather than to coerce. Like Toronto, these cities are still reaching out for more industries, and they realize only too plainly that they can ill afford to make conditions unattractive when the smaller towns close by are glad to welcome any industries that may come along on terms of their own choosing. In pursuance of this policy only a small proportion of the Detroit offenders have been proceeded against. In the last year and a half some eighty-seven complaints have been filed, but only $140 collected in fines. Meanwhile, much has been done to rid the city of smoke. The annual reports of the inspector show that good results have been obtained. Stokers and other devices have been very generally installed, 360 factories having been equipped in three years at an estimated cost of $100,000.

By no means least of the considerations which seemed to favor a policy of education rather than coercion among the inspectors present at the convention was the fact that nearly all of them had seen manufacturers, under pressure and at considerable expense, equip their plants with what promised to be a most satisfactory device, only to find their chimneys still belching smoke, if not as badly as ever, at least in a manner which would constitute a nuisance under the by-law. The explanation of this difficulty is to be found in the statement already made; i.e., that there is no universal smoke consumer. A device that works admirably in one instance may prove an utter failure in another. Success depends upon a proper understanding of the conditions governing combustion in each individual plant. These conditions vary in a marked degree, according to the construction of the boilers, the variety of fuel used, the degree of heat required, according as the load is fluctuating or stable, and a hundred and one other conditions which may arise to complicate the situation. It is rarely that such conditions can be accurately determined in a preliminary examination. Experiment by the process of elimination seems to be the only certain way of finding them out. And sometimes it takes a lot of eliminating. One well-known Toronto firm have installed four different devices, every one of which they have had to throw on the scrap heap. They are now on the fifth device, having spent in all upwards of $20,000 in experimenting, without arriving much nearer the solution of the difficulty.

In the light of such evidence what justification can there be for compelling a manufacturer to spend time and waste money over the installation of a device when there is no guarantee of success? If success were assured no by-law would be necessary, for every manufacturer knows that he would be money ahead if he could consume his smoke by the expenditure of a reasonable amount of cash. If he has a big plant and his coal bill is abnormally large, he is probably willing to spend some money in experimenting, but the average manufacturer prefers to wait until he can secure a device he knows he can depend upon.

Meanwhile, the inspector tells him the smoke nuisance

must be abated. He replies that he will gladly equip his plant, provided he is told what appliance will work satisfactorily on it. But the inspector says: "No; I will not advise you on that point. I do not even know whether there is an appliance that will consume your smoke or not, though I presume there is. All I say is that you must abate the smoke nuisance or you will be fined."

It is gratifying to be able to report that Commissioner Samuel T. Douglas, of the Detroit Board of Health, who has given a great deal of attention to the subject of smoke legislation, made a strong plea for the manufacturer when he said, in a thoughtful paper read before the convention, that the manufacturer was surely entitled to the benefit of expert advice if the city were to step in and compel him to spend money on what was practically "a pig in a poke." Commissioner Douglas would not go so far as to say that the city should assume responsibility for the success of each device thus installed, but he did think that the inspector and his staff should be trained experts, who were thoroughly posted on the subject of combustion in all its phases; that they should hold themselves in readiness to examine any plant upon request with a view to determining the conditions governing combustion in that plant, and then to express an opinion as to the device most likely to afford satisfactory results. There can be little doubt that if this plan of co-operation were more generally observed the smoke problem would lend itself to a much easier solution.

Respecting the various stokers and smoke-consuming devices on the market many statements of a conflicting nature were made at the convention. Next year's convention will probably see this feature intensified, for by that time the experience of each inspector will have become richer and more varied. The device he is pinning his faith to at present will have revealed its vulnerable points to him, and the enthusiasm he has for it will have been transferred to some new appliance as yet untried. One enthusiast from Rochester, who has been studying smoke abatement from the City Beautiful point of view for several years, has sung the praises of ten different devices at ten different stages in his varied career, always with perfect sincerity. He is now looking for a new source of inspiration.

But on one point the inspectors seem to be unanimous. The steam jet, to give satisfaction, must be made automatic. On a small plant that is not subjected to heavy loads this appliance is capable of doing good and efficient work, but too frequently it has no opportunity of showing what it can do, because the careless fireman forgets to turn it on. Even with locomotives it works successfully when carefully attended to. The Michigan Central have equipped thirty of their yard engines at Detroit with steam jets at a cost of about $12 each, and the results are said to be quite satisfactory. The Canadian Pacific are now experimenting along similar lines in Toronto with equally satisfactory results. But the steam jet has come to be looked upon with disfavor for industrial establishments, owing, first, to the fact that it is likely to be neglected, and second, to the fact that for a plant whose business is expanding it soon becomes inadequate. Most manufacturers prefer to force their plants when trade is good rather than increase their capacity. A forced fire will always smoke, no matter what the consuming device may be, and the small manufacturer with a $25 steam jet, who tries to get his boilers to do twice as much work as they are intended to perform, becomes a constant offender. From the inspector's point of view he is also a most objectionable offender, for he is prone to generalize from his own cheaply-acquired experience on the imperfections of smoke-consuming devices in general, thus interfering with the success of the educative policy which is being followed in so many cities.

PROPOSE BETTER TRADE RELATIONS.

Announcement is made from New Zealand that the present session of Parliament will deal with a measure aimed at promoting trade between that country and Canada. Such an arrangement would meet with great favor here. New Zealand imports considerably over $66,000,000 worth of goods a year. A large part of this consists of manufactured articles which Canada is well able to supply. Canada in turn imports much that New Zealand produces. Hence, a valuable mutual trade could be developed.

Some time ago a direct steamship line was established between Vancouver and New Zealand ports. The success of this experiment has been watched with interest by those who carry on an export trade. Complaints have been made that this service has not been as satisfactory as it should be. A slower service is given than by the mail boats and the accommodation is inferior; yet freight rates are kept up at an unnecessarily high figure. These complaints are already being investigated. It is to be hoped that no inefficiency of a subsidized steamship company will prevent the full expansion of this intercolonial trade.

That Canadian manufacturers appreciate the importance of the market is shown by the large number who are sending exhibits to Christchurch to the International Exhibition.

About forty-eight in all have made provision for exhibiting there, and these cover a wide range of industrial activities. In most cases these efforts to increase trade are not experimental, but are the result of an encouraging experience in the past. Canada has been exporting to New Zealand nearly six hundred thousand dollars' worth of goods annually; not so very much, but ample to show the feasibility of the trade. This represents just four-fifths of one per cent. of the entire imports of that country. In fact, the colony buys from abroad almost all the manufactured articles it uses.

Investigation will show in what direction an export trade may be profitably extended. The agricultural pursuits and general life of the people of New Zealand are such as to leave great scope for sales of agricultural implements and other manufactures which are carried on successfully here. The important point about the information conveyed in the forecast of legislation in the New Zealand Parliament is that the people of that country really want our goods. This places us at a distinct advantage from the outset. It remains for us to meet the wishes of the New Zealanders by vigorously pushing trade in that quarter. The benefits of export trade and the extent of this particular market both invite us to activity.



THE NEW WAY

INCREASE PROFITS BY ECONOMY

How Cost of Material may be Reduced and Efficiency of Labor Increased by Systematic Attention.

By H. L. C. HALL, Fellow I.A.S.

ARTICLE III.

HITHERTO we have dealt with that very necessary preliminary to economy, an exact and detailed knowledge of our expenditures. Facts as to this item are an absolute necessity if economical administration is to be made possible. Let a suggestion be made that expenses be reduced. The very first remark is, naturally, Where? Where are we spending too much? Where may the knife be safely inserted? Without full details at hand the answer to these questions is, at best, a mere guess, and the remedy when applied is like to be worse than the disease. On the other hand, given the necessary details, the answer is instant; in fact, it is unlikely that the question will be asked, for extravagance will be noted and curbed long before the action becomes a measure of safety.

There are those so fortunate that for them economy is merely advisable—not imperative. These have so great a profit and so wide a demand that they ask what price pleases them and spend where they will. But that is only for to-day. Economy is only a jest and a by-word with them now. It will be different to-morrow. They are not to be left in undisputed enjoyment of this so rich field. Others are spying out the land, and will soon bid for their share. The Canadian merchant and manufacturer should build for the time to come, and not for to-day alone. Here he has an Empire in the making. Let his plans be laid on a broad foundation, which will permit of expansion without reorganization, for the field which is his to-day is as nothing to that which will be his in the near-by time to come. Where he has possible hundreds of consumers of his product now, he will soon have thousands. Where are possible thousands now will be millions anon—and not so far in the future either, for Canada is in her youth, not her babyhood. Now, do not think for a moment that all this is to be yours for the picking. Others see the possibilities as well as you. Others are like to try to share with you the profit. There is, as Kipling says, "the fight between." Look to your defenses. Can you stand a siege? See that you find out the weak spot in your wall before it is found by the enemy.

Trade is at best a cold-blooded affair. The "Law of the Jungle" is the law of trade. "Eat or be eaten" is the rule. It sounds hard, but so it is. The lame, the halt, the blind, the timid, and the hesitant have but scant chance of survival. It is not at all necessary to become a business pirate to be a business success, but it is necessary to get what you pay for, and as a consequence there must be no mixture of business and philanthropy. Be philanthropic if you can afford it, but do not delude yourself by making it at the expense of your business. If you use your business as a vehicle for charity, you will some day find that there is but little save the charity left, and you may do your best to live on that.

The Cost of Your Product.

The cost of your product is found by dividing the total of your business expenditure by the total amount of product. Now, it may very well be that there is at the present time little or no relation between the cost of making an article and the price at which it is sold. Possibly you have a practical monopoly, or near enough to a monopoly, to enable you to set your own price. That makes little or no difference. Some day there will be others. Besides which there is to be remembered the fact that greater economy means greater profit, no matter what your selling price may be. It must not cost more to do a certain thing in your shop to-day than it did yesterday. Where it does there is something wrong. You will continue to sell for what you can and for as much as you can that which you produce. What you can get will some day be less. The age-old law of supply and demand will take care of that. It still remains true that your net profit will always be directly proportioned to the economy of operation and administration.

Here we touch a new subject—executive economies. These are no less vital than the economies which must be practiced in the shop itself. The successful man plays no favorites. Every item of expenditure must give a good account of itself or it will not be repeated. A successful business should be a smoothly running machine, without jar and without lost motion. The smoother it runs the less power it takes to run it. Every part, even the most unimportant, must work smoothly with every other part. Keep the sand and the dust out of the bearings of your business machine if you wish to prevent heating, and if you expect to get the very highest efficiency out of it. A faulty part or the faulty adjustment of a single piece in the machine will go a long way toward neutralizing the effective work of the whole affair. Therefore, if there is a jarring element in your force adjust it—or get a new piece. The man who cannot get along with the rest is an expensive luxury no matter how efficient he may be. Make the policy of your establishment yourself, and thus set the tune to which all must march; and if there is a man there who cannot keep step, let him fall out and march to another tune and in another procession. A man who does not fit will cause a heap of discontent and poor results from everybody else, so, no matter how good he may be, let him "get in line or get out." It is not too much to ask. You are paying the piper and have a right to set the tune. Now, let us consider for a few minutes the business machine and a few of the places where it may go wrong if not carefully watched and oiled.

The Purchasing Department.

It is here that your money, or a considerable part of it at least, is spent. It is here that you may find many wholly unsuspected leaks and wastages. Your purchasing agent may be a man of the highest degree of efficiency and of absolutely unimpeachable integrity. Let us grant that he is all this. Let us suppose, for instance, that you are your own purchasing agent. The department is a good place to look for leaks just the same. Money honestly spent is not always wisely spent. Are you in a position to be sure that there is no foolish buying done? Suppose your highly efficient purchasing agent should die to-morrow. Suppose he should leave you. How much of his highly specialized knowledge would be at your disposal or at the disposal of his successor? It is your right and your duty to know at first hand all there is to know about this department. You have paid for the knowledge, and it ought to be ready for you for the asking—or even without the asking for that matter. The point is that you must buy in the lowest market, and that you must at all times be sure that you are doing it. You should know this, not from supposition or from the statement of some one else, but from actual first-hand knowledge. Many a merchant and many a manufacturer has gotten himself into trouble before now by taking things for granted. Possibly too much is recorded simply and only in the mind of the man in charge. This is not fair. If all

the valuable facts in this department are "under the hat" of the man in charge, he might some day take a notion to remove his hat and the head under it to some other sphere of usefulness, and you are thus deprived of something which really belongs to you, and for which you have paid. But you cannot get it either by process of law or otherwise. Thus it is up to you to get it in advance. Some time you are likely to be glad that you did so.

There is a great tendency, and perhaps a natural one, to continue to buy a certain article—any article—at a certain place and at a given price simply because it has always been bought there and at that price. This is very common, but all wrong. Possibly the place and the price are both right. And possibly not. Knowledge on this point is indispensable. There is, for instance, a great chance for waste in the purchase of small supplies and materials which seem insignificant. The Mayor of the city of Kalamazoo discovered the other day that the city was buying certain small supplies in the steam-fitting line at prices which were about three times the figure they could be bought for when bought by a private purchaser. This is quoted because there seems—according to the daily press from which the facts are quoted—to be no question of dishonesty or graft involved. It was simply a case of its being nobody's business to know that the prices were right. The Mayor, being a manufacturer, knew what such things ought to cost, and so made a protest. The point is here. Is there a similar condition in regard to some item or some line in your plant? How do you know that you are not unwittingly paying two prices for some of your supplies, or for some of your raw materials for that matter? How much of a certain article—any old thing—did you use last month? How much was paid for it? How much did you use and what did you pay the month before? Was it less in price or more, and why? Here are the questions. Can you answer them? Can any one? If not, why not? Surely they are legitimate questions. Surely they are pertinent. If you cannot answer these questions, or if you cannot get an answer to them in short order, it is time for a little overhauling of your purchasing department.

A Plan for a Record.

The list of separate articles used in your factory is possibly not a large one, but whether large or small it is not an impossibility, or even a difficult thing, to have an index of the whole list, whether it be an article of constant use or one which is bought only occasionally. Let us, then, provide such an index. This should be a complete, continuous record of all articles purchased—and when, and where, and at what price, and at what price offered, and by whom. In fact, it should be a record of all the facts relative to the purchase of that particular item, past, present and future.

Loose sheets in a suitable binder, or cards in a suitable case, will be the logical means of keeping this record. A book soon becomes full, and not so much that as that it becomes unevenly filled, and thus must be recopied or else scattered, so that valuable time is wasted in finding the information desired. The writer favors loose sheets for this use for various reasons. Principally because sheets take up less room than cards. The index need not be an expensive affair, either to get into use or to keep up. There are a number of concerns in Canada offering outfits for such purposes as this, and at all sorts of prices, from a single dollar up. The first step is to get such an outfit and of such magnitude as may be required. The beauty of the loose-sheet system is that it grows as its need grows. The small affair of to-day can be expanded indefinitely as the need arises.

Advantages of Loose Sheets.

Use one sheet for each item, and arrange the sheets in the binder in such a manner as may be deemed most convenient; that is, the sheets may be bound alphabetically or in classes as may be desired. If the factory be a large one, the arrangement by classes may be found the most convenient, but this is of little importance, as a short experience will demonstrate the best method. And here is another advantage of the loose-sheet plan, for the manner of arrangement may be changed at any time with little trouble and without rewriting the list. Let the name of the article appear at the top of the sheet, being entered there with pen and ink or on the typewriter. Have the sheet ruled in oblong or square spaces of suitable size. Allow space for the following items: date of quotation, name of firm quoting and price quoted. This will be on one line. The next line is reserved for the record of actual purchase with the following items: Date of bill, price and terms of delivery. It will be readily seen that as this sheet is used for this record it will become a permanent record of source of supply, quantity used during a given period, and prices paid and quoted. This information will be at your disposal at a glance any time you choose to see it.

These data will be found a valuable factor in economical buying. One reason for this is because it will beget the habit of asking for quotations on your needs. Do not be chary of asking for quotations on competitive goods. Any firm which has goods for sale is always willing to quote prices, and a record of these quotations will teach you something which will surprise you unless your experience is vastly different from the author's and from the experience of the majority. If you ask a single firm for quotations on their line several times without giving an order they are pretty sure to commence to enquire why they do not get a share of your orders, and the next step is sure to be a quotation which will get a share of your trade at least. This is one way in which the habit of asking for bids is a good one, even for very moderate amounts of goods. You know from your own experience that a quoted price is likely to be less than the price charged you on an open order.

Read Trade Papers.

Part of the duty of a good purchasing agent is a careful reading of the trade press. The advertising pages of the trade magazines are the show-windows of the business world, and there is just as much valuable information there for you as there is in the reading matter if you only view it properly. Part of your duty as manager is to provide these bringers of information. See to it that the duty is not neglected. Nor is it enough to see and read and remember that announcement of the man or the concern which has something for sale which you will need to-morrow or next week. Put the facts on record where they will be available for future use when needed. In other words, enter them on the record sheets above described. Enter the name and address of each possible source of supply, and when the proper time arrives give them a chance to bid on your needs. If the possible need is imminent, get a quotation at once, and put that on record also. Get all these people to compete for your trade, just as you, possibly, are competing for the trade of others.

There is a great tendency to buy small supplies next door or around the corner, because the amounts are small and the need immediate. The need should not be immediate in most cases. The record spoken of will help you to anticipate your needs, and so to make a very appreciable saving of cost in many cases. It is well to buy at home, or near home—but only when you can do as well there, all things considered, as you can do elsewhere. It is a poor idea to buy from hand to mouth when there is money to be saved by anticipating your wants a trifle.

After your purchase record has been kept for some time in the manner spoken of you may find that there has been a considerable sum spent for them in the aggregate, and that there is a much larger chance for economy than you suspected. In some of these small things there is another thing to be thought of. It is by no means rare to find that the want of a small item at a particular time has caused an utterly unnecessary waste through delay. It should be the business of some one to know of this need before it occurs, instead of afterward. Let the responsibility be placed where it belongs, and let the mistake be one of those which are allowed once, but not a second time. One of our modern humorists has said: "Success does not consist in not making mistakes, but in not making the same mistake twice."

Get What is Ordered.

Next, be sure that the goods you order and pay for are delivered. Too many times it has been found that in common practice an inferior article has been delivered where a superior article has been ordered, and that the fact was not discovered until the goods were used up. The trouble has been that it was no one's business to see that the goods were correct in quality as well as in count and price. The receiving clerk finds the weight, measure or count correct, and that is as far as his interest and his duty extends. Very likely he is not able to judge the quality of the goods delivered, but some one is able to judge, and that some one, whoever it may be, should make it his business to give a rigid scrutiny to all goods received. This may seem a small thing. Sometimes it is far from small; but even if it is small, your perfect business machine is made up of small things.

There are certain lines of manufacture where some at least of the materials purchased must be purchased or contracted for long in advance. In these cases, particularly, a complete file of information as to past experience is valuable. From a record as here outlined the direct ratio of materials used to goods turned out is easily arrived at.

The Labor Element.

A factory is rare where at least one-fourth of the total cost of the total output is not a charge for labor. In many cases three-fourths of the cost lies in this item, and cases are not wanting where nine-tenths is the portion. Taking this fact into consideration, it seems strange that so little effort is put forth toward increasing the productiveness of the labor unit. A bit of raw material, valued at twenty-five cents, cannot disappear from a well-conducted establishment without its loss being known and the leak stopped at once. How is it with an hour's labor, worth this amount or more?

Now, please understand at once, and right at the start, that there is nothing in what I shall say which is to be construed as advice to crowd or rush your workmen. That cannot be done with any degree of success. Even the most ignorant of foreign-born workmen will resent such tactics, and will take from you in ways you cannot detect much more than you can possibly force out of them by the most strenuous driving.

What is advocated here is the intelligent buying of labor and its careful and intelligent handling afterwards. In the first place, who hires the men who come into your factory? Half a dozen different people probably, each for his own department. If the concern is a large one, the number of those who buy labor is probably a dozen or more. And it is a pretty safe bet that not one out of the lot is capable of a well-formed idea on the subject in advance of the actual test. The best foreman on the floor is usually the poorest judge of the timber he is hiring in the way of workmen. At least this is the finding of many of our most successful factories. You would not entrust the buying of materials to a partly-educated and wholly prejudiced buyer. Why, then, entrust the buying of labor to such an one? Yet it is done almost universally. If a junior clerk is to come into your office, it is only after the most careful investigation of his record. How many of the men in your factory have been the subject of such an investigation? In many a place where twenty to two hundred men are employed there is not even a record of the home address of the men, much less any attempt to keep a record of ability or of antecedents.

This is all wrong. Such indifference on the part of the employer has its effect in two undesirable ways. First, it brings to you all sorts of men; and second, it breeds a feeling of absolute irresponsibility. When such a man is outside the gate he is as absolutely cut off from any connection with you as though he had never drawn a dollar of your money. Intelligent oversight of your men does not mean that they are, to use Josiah Bounderby's expression, to be "fed on turtle soup and venison with a gold spoon." you cannot afford that, and, what is more, the men do not want it. Neither does it mean that the men are to be treated as though they were not reasonable creatures. But there is scarcely one among them who will not be the better workman for you through having it shown him that he is something more than number nine-ninety-nine on the pay roll.

Registration of Employees.

A trade association in the Eastern States has reduced this thing to a fine point. All of the manufacturers of the locality, which embraces several villages and two good sized cities, are members of the association, which is known as the Metal Trades Association. Each member is bound by agreement to hire men only through the association. Thus, when a man wants work in that locality he registers himself with the association, giving all the details of his record. When a man is laid off or discharged by any member of the association the fact, together with the reasons for such discharge and the record of the man, is reported. After this plan was put into operation it was but a short time before every floating workman—the man who never worked long in one place—found himself spotted, and as a consequence he had to leave that locality, not because he was asked to do so, but simply because the association's officer got tired of sending him to place after place for a stay of a few days or a few weeks, as the case might be.

A case was shown the writer of a skilled workman, capable of earning four to five dollars a day, when he would work, who had the habit of going on a three-days' spree every pay day until he was pretty well known, and until his family was in dire straits. This man came to the association for work shortly after its organization. He was promptly placed, with the usual result. After he got over the spree he was back again. This time the matter had been talked over among those interested, and as a result he was told that he would be hired only on condition that he allow his wife to handle his money. He tried all the shops in order to get away from this plan, but in each one was referred to the association. At last he accepted the terms, and the result is that the man has not been on a spree for six or seven months. Rather outside the province of the average employer, you will say. I do not see it. You will spend money any time to increase the efficiency of your machinery. Then why not spend a little time and effort to increase the efficiency of your human machines? It will pay, and pay handsomely. It is in some localities quite the fashion to beautify factory buildings and grounds. Civic pride, you say. Not a bit of it. Certain wise ones have discovered that it pays to spend a little something on the comfort of the worker. It is a cold business proposition. You get more out of them.

APPRENTICESHIP AND TECHNICAL EDUCATION

By J. P. MURRAY.

WHAT has been meant during the last few centuries by "apprentice" is one bound by articles to a master for the purpose of being trained as a craftsman. It is in this sense the word will be used here, and not that now understood as a "learner"—some one who is not bound in any way, but attends a shop or factory presumably to learn a trade, but, as experience frequently proves, simply to put in time in one shop at a given wage until he leaves to go to another trade or industry for a few cents in the week increase. To this state of affairs, coupled with the limitation of the number of learners allowed in a business, is due the great dearth of skilled labor all over this continent.

Disappearance of Apprenticeship.

Formerly, to learn a trade apprenticeship was insisted on. Then the apprentice belonged to the master, and, instead of being paid a wage, had to pay a fixed sum, or was allowed a very small gradually increasing yearly compensation. The advance of modern invention, the opening up of new countries, the removal of baronial jurisdiction, the introduction of individual right, confederation of States and broad ideas in government, the association of men and women in organizations governing labor, the competitions in commerce, aided by the development of land and water carriers, hand power yielding to steam and electricity, and many other of the marvellous changes which have taken place, all have had an influence towards individual freedom, which has made the idea strong in the minds of workmen that apprenticeship under articles is undignified, slavish, and subjects the person to unnecessary authority.



The Royal Alexandra, Winnipeg.
This will be the headquarters of the Canadian Manufacturers' Association during the Annual Convention, September 17th, 18th and 19th.

Wrong as this is, the idea has become fixed, and the outcome is the great scarcity of skilled labor, so much so that commerce, industry, and even the home, have very seriously suffered. Intelligence in seeking a remedy has developed the technical school. But even in this remedy the experimental stage has not been completely passed.

Need of Apprentice System.

With technical education must be revived apprenticeship. And properly so. Firmness and discipline are necessary with youth which has, in a degree, been released from parental influence and is now being brought up in an atmosphere wherein no authority is recognized but a labor union. Apprenticeship binds the youth to an employer for a term of years, and it should carry with it compulsory attendance for a given time at the technical school, or, in districts where there is no technical school, at lectures supplied through the university authorities and arranged for by the proprietors of industries.

During the last fifty to seventy-five years the economics of manufacture have undergone a great change through the introduction of machinery, which reduced the demand for manual labor. But this is balanced by the enormously increased demand for the output, increasing it to such a degree as to vastly multiply the number employed. Designs, too, have been multiplied, and the demands for new material and the methods of its production have greatly altered. A very serious condition has resulted in the growing specialization which has now forced technical education on the State. And herein comes the all-important reason why technical education must be extensively and generally urged forward. The more complete it is, the better for the community at large.

Comparison of Methods.

In the days of long ago the apprentice, working side by side with experienced men doing general work, soon gained a complete knowledge of his trade and the relations of one part of the work to another. He was turned out a qualified workman. He then knew the values of the materials from all points, and all the methods of its manufacture. To-day an apprentice cannot learn more than he is smart enough to pick up. He is set to turn out one particular item. He has no knowledge of the material he is using, nor the relations of one part to another. He has not, and cannot have, in the nature of things, any interest in his work. As has been already written, he is simply earning a wage, and in doing so prefers to hear, most of all, the whistle blow from outside the factory walls.

Most employers are not free from responsibility for such a serious condition. The indifference and actual unwillingness on their part to train new hands, coupled with the restrictions on the part of trade unions in the number of apprentices to a shop, has been gradually eliminating apprentices from the shops.

Compulsory Technical Training.

As the people are agreed that the State should prepare for a comprehensive and general system of technical education, is it out of reason to go a couple of steps further and compel attendance by apprentices? This compulsion becomes necessary, as work in factories—the larger the factory, the more is it a fact—cannot be delayed by the necessity of a skilled mechanic stopping in his work to explain methods to an apprentice. Most wages in factories are earned on piece-work, and in trades, on contract work. In the former quantity governs; in the latter, time. Discipline among employees again would be upset, and little enough regard is given to it by the general run of employees now to introduce further loosening of the cords. The wage-earner appreciates it when ten cents is taken off his ten

dollars, but he forgets to recognize the loss of ten minutes in his work of ten hours.

Attendance at Classes.

If a duty to the community by the State has been assumed in the foregoing, in supplying the means of technical education, and by the apprentice, in conforming to the regulations, is it beyond reason to expect the employer to accept his share of responsibility? This would be in releasing the apprentices from the shop during certain hours in order that they might attend technical schools or lectures, and in districts where there are no technical schools in giving the use of his premises, or part of them, including certain machinery, for the use of the lecture and demonstration.

A Graded System.

The ideas which flow from the consideration of this subject may be followed further. It is not suggested to restore in any way the ancient manner of apprenticeship. It may, however, be advisable to introduce a system of degrees. This is done in the Normal Schools, and there are different class certificates. The privileges which were obtainable under the old orders of guilds might be instituted with and governed by degrees. The "bent" of an apprentice would soon evince itself, and his application and ability form a basis of judgment by the professors. There would undoubtedly be a great demand for the pupils of highest degree, and the remunerative positions offering would place the school governors beyond all doubt as to attendance by enough pupils.

Trades Unions and Apprenticeship.

Another phase of this subject deserving attention is the way trades unions view the question of apprenticeship and its relations to technical education. To do this properly a knowledge of their position is necessary. Particulars have been procured through a reliable source and a section chosen which would embrace a large population and a great variety of callings. Over twenty-five lines of basic industry were included in the research, and a series of relative questions have been submitted to employers and officers of trade unions. In the building trades re the term of apprenticeship sixteen members did not answer the questions submitted. Of twenty-four unions from which figures were obtained, the average apprenticeship is three years and seven months. Of the forty unions to answer, eleven allow only one apprentice to a shop. Another eleven did not state the number, and the balance varied from one apprentice to three journeymen to one to every ten. Of eight clothing trades, the average years of apprenticeship appears to be three and the number allowed not higher than one to ten. The report shows in the case of seventeen firms in printing trades four years are required for apprenticeship, and the number of apprentices varies from one to a shop of twenty workmen to one to three. In twenty-one metal trade factories the average of an apprenticeship is three and a half years. The worst is one to a shop of ten. Under these trades the best show for an apprentice is one apprentice to five journeymen.

To-day, if an all-round workman applies for the position of a specialist, he does not stand as good a chance for engagement as a boy even, who has devoted his time to learning that particular machine. The all-round man here is understood to mean the rule-of-thumb educated man. The boy gets a less wage than the all-round man would accept, and probably will not expect advancement. The graduate of the Technical School, who learns the scientific part of any special department, will not be satisfied to continue along in one department, but will become ambitious to rise, and in this ambition will seek still higher education, and develop into, what is the hope in this paper, one who will induce and direct other beginners to become apprentices and attend classes at the school.

There will always be those who, through misfortune, lack of ambition, or age, are unable to advance themselves, and they will be found so numerous that the condition of low-priced men not being obtainable need not be feared as a deterrent to the advancement of apprentices by technical education. Another field from which the low-priced man will come will be from those who are ever shifting their occupation. It is well known that of the many who learn a trade a very small proportion are adapted to it, and the majority will never become first-class, skilled mechanics.

Neglect of Opportunity.

Exceedingly few apprentices take advantage of the technical schools. How few apprentices appreciate the value of mechanical drawing or mathematical calculation? And yet they are two qualifications which will commend a lad very strongly to an employer. Even if, during his apprenticeship, the lad may not earn as much as if he were not bound by his articles, and so not allowed to go from shop to shop for a slight increase in his weekly wage, when his time is out he commands a much larger wage than he could earn if he were several years older, and yet lacked technical schooling.

When manufacturers and employers understand the value of technical education—when they understand that the better educated is the ordinary rank and file in the workshops, the better chance there will be to produce more skilfully and perfectly, and at the same time more economically—the better chance there will be to compete with the imported articles in our own country, the better chance we shall have to extend our sales in other countries; when they understand this, they will pay more attention to apprenticeship and technical education.

A Federal Duty.

The provision of this education is not the duty of one Province or of one city. It is the duty of the Federal Government. As a father educates his child, so must the nation educate the citizen. Our youth must be given the opportunity of earning a living. It is his right as a citizen. His education must be directed towards making our people and our national life unexcelled among the nations of the world.

That technical education should be encouraged by Federal, provincial and municipal governments is now accepted as necessary, if our industrial life is to be based on a solid foundation. The welfare of the community from all standpoints depends on the continued maintenance and growth of our industries. For many years the people have been contributing in their taxes for the education of young men, sons of men, with few exceptions, wealthy enough to pay the whole cost, for the Church, medicine and law. This has been allowed without a demur by a law-abiding, peaceful people. The vigorous growth of our country and the enormous development of industry, embracing the use of all kinds of raw materials from their first production to the finished articles, bring into prominence the right of the sons of artizans to be cared for with even greater and broader consideration than has been given to the learned professions.

Preliminary Work in Schools.

As has been advocated before, the public school system should be brought into closer relationship to our industrial life. It must be from this wide field of youth that apprentices will be drawn. The natural inclination of children is towards construction; so in the public schools, even in the elementary grades, more or less attention should be given

to instruction and practice in some forms of productive work. Such a step will make the students and pupils more thoughtful, inventive, and more considerate in what they undertake. The mind will be better disciplined, and the hand will become accustomed, bringing a greater appreciation of the industry to be adopted.

Train the Canadian Youth.

This article, already too long, cannot be closed without a final word to employers and manufacturers. Continually in the press may be read the plea for more skilled workmen. This has been for some years almost of daily publication. Foreign offices are appealed to, manufacturers are circularized and Governments interviewed, with as yet no material benefit. Were the manufacturers to capitalize the taxes they pay indirectly for the support of much that is of little use to them, and contribute a lump sum, quite enough would be available to erect and equip schools for the supply and education of an army of apprentices.

Resolutions and deputations undoubtedly have their value in educating the public to the necessities of our industries. Yet a more practical and a more direct result might be accomplished if various trades would unite for the establishment of classes in a school. And if the different industries would do likewise, then all employers would give proof of their earnestness on behalf of Canada by their determination to get Made-in-Canada skilled workmen out of the Canadian schoolboy and the Canadian apprentice.

BLOWING A BESSEMER HEAT.

There is no more spectacular sight in iron and steel manufacture than the operation of a Bessemer converter. On cloudy nights the reflection of the flame and sparks is visible for miles. The theory is no less spectacular in its simplicity, since it involves merely the blowing of cold air through molten pig iron in order to make steel. Prior to the advent of the pneumatic process wrought iron was made direct from the ore in very small unit operations, and wrought iron was made from pig iron by the slow and laborious process of puddling. Steel in those days was the product of the crucible melting pot, which made it from puddled iron. Our present soft steel replaces wrought iron, rather than the material formerly generally designated as steel. The Siemens open-hearth process was just being brought out.

The puddling furnace even now treats heats of only about 550 pounds, fifteen heats per twenty-four hours; say twenty or twenty-five tons per furnace per week. The Bessemer converter makes as much tonnage in a couple of heats.

The Bessemer converter is an egg-shaped vessel, open at the small end, and swung on its centre of gravity. In the best practice it is charged in a few seconds with ten tons of molten iron from a ladle, the iron from the blast furnace or furnaces being stored in a large mixer so that the ladlefulls are substantially uniform. The blast is turned on, the converter mouth turned upward, and then ensues a series of violent reactions. The manganese is promptly burned out, then the silicon, then the carbon. A flame plays about the mouth and showers of sparks are emitted. The blast is generally on for about eight minutes, during which time ten tons of molten pig iron at a red heat have been converted into white hot molten steel, about 5 per cent. of impurities having been burned out. The vessel is tipped down and the contents poured into a ladle, to which is added a small quantity of ferro-manganese. In a couple of minutes the converter is charged and ready for another blow, the best practice being ten to twelve minutes for the entire cycle.—The Industrial World.

GREAT GROWTH IN TRADE.

Another year's trade returns for Canada have been issued, and a large increase in the total foreign trade is shown. It is impossible to estimate with any exactness the home trade, but it is certain that, however great our foreign commerce is, it is a mere fraction of the value of the home market.

Although the detailed reports have not been published yet, the general trend is given. The imports from Great Britain increased from $60,538,811 last year to $69,298,751 in 1905-1906, or an increase of $8,759,940. The exports to Great Britain were $127,456,471 as compared with $97,114,867 for 1904-5, representing an increase of $30,341,604. Thus our increase in trade with Great Britain totals half our entire increase. Our exports to the United States amounted to $83,546,406, an increase of $13,119,641 over last year; our imports from the same country totaled $180,729,458, which is $14,688,568 more than during the preceding year.

A noticeable feature of the returns is the effect of the special surtax on German goods. As a result of this our imports from Germany have dropped from $12,282,637 three years ago to about $7,000,000 for 1905-6. Imports to and exports from France have both increased by about $500,000.

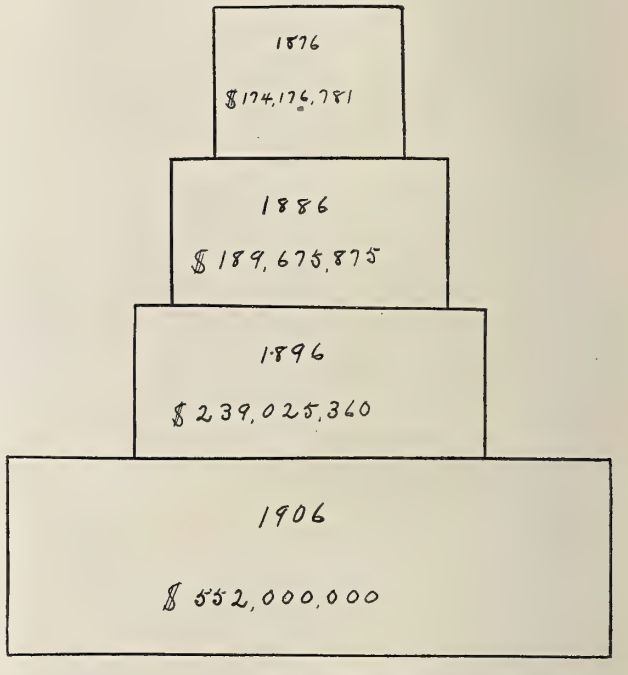


Diagram showing the Value of Canada's Foreign Trade at ten year intervals.

The great expansion of trade is a subject of satisfaction. It is regrettable, however, that our imports of manufactured articles should bulk as large in the returns as they do. It is scarcely creditable to Canada that, with her lavish natural resources and immense facilities for production, the imports should go on increasing as they do. The wealth of a nation cannot be measured by the gross amount of imports. It is poorer by every dollar's worth of goods imported which might be manufactured here. In the midst of prosperity it is well to cast the account and see if too much of it is not the result of a sacrifice of natural resources, which we shall suffer for later.

THE CANADIAN NATIONAL EXHIBITION

THE Canadian National Exhibition, which is now in progress in Toronto, is of wide interest to Canada. Its growth year by year has been a subject of increasing pride, until now it holds a position of national importance. This year the increase in building accommodation, and consequent improvement in the effectiveness of the exhibits, add greatly to the success of this unique annual exposition.

Of greatest interest to manufacturers is the Process Building. This department, which is attributable for its inception to Mr. W. K. McNaught, has since the beginning drawn great crowds of interested people to see the methods of manufacture of numbers of the common articles of use. This year a spacious new building, illustrated on this page, has been erected, which is the finest of the Exhibition buildings now standing. Among the processes of manufacture which are shown in actual operation are silk-spinning, carpet-weaving, cloth-making, cotton-spinning, hat-making, boot-making, bookbinding, lithographing, glass-cutting, baking, pure food making, canning, packing and other industries. Every one of these represents an article of common use, and so an added interest is lent to the fascination of the working of modern machinery and methods. This building no doubt provides more instruction to the average man than any other part of the Exhibition. In this same building are shown varied specimens of agricultural implements, stoves, heating apparatus, and other manufactured articles.



PROCESS BUILDING

Ranking next to this building in interest for manufacturers is Machinery Hall, where a very complete array of machinery is on view. This building is peculiarly well fitted for the showing of machinery by its lightness and spaciousness, and the extent to which manufacturers have made use of it amply proves its popularity.

Most extensive and elaborate of all is the display in the Manufacturers' and Fine Arts Building. Here are assembled all the lighter and finer manufactures, and the tastefulness of the booths draws a steady stream of visitors. Day and night there is a varied stream of people passing hither and thither, themselves lending no small interest to the busy scene.

In the Transportation Building vehicles of all kinds are shown. This is always a well-filled department, and provides a fine opportunity for comparison.

Of no less general interest is the showing of live stock, wherein this Exhibition is particularly strong. All industries are so closely bound together that the progress in breeding and raising high quality cattle is watched jealously by all who depend upon the prosperity of the country for their own welfare. Canada has maintained an enviable position on this continent for its success in this respect. In Ontario and the East continually more attention is being paid to this side of farming. The result is shown in the exhibits.

A description of the National Exhibition comprises much more than a catalogue of the buildings and their contents. The influence of such an affair is widespread. The assemblage into one place of all that is best in the national resources helps the citizens to appreciate the greatness of those resources. No one can look upon the exhibits of farm produce, live stock, minerals, manufactures, and art without gaining a wider comprehension of the country's greatness. It has an educative influence that cannot be over-estimated. For the producers there is aroused a healthy spirit of emulation and rivalry. The mere seeing of what others are doing in a similar line arouses an ambition to equal or excel their efforts. Besides, the interchange of ideas and experiences is productive of good. For the general public nothing but good can result from observation and comparison.

The directors and general public are to be congratulated on the undoubted success of the Exhibition. By wise foresight on the part of the former and uniform support by the latter the Fair has grown to very large proportions. It may now be considered one of our national assets.



A BIRD'S-EYE VIEW

REGINA—A WESTERN METROPOLIS

A Record of Progress—The Centre of a Rich Agricultural District—Growth of Manufacturing Industries.

By A. E. BOYLE.

THE rapid extension of the grain-growing area of the Canadian West has brought into greater prominence a number of important commercial centres, among which Regina, the capital of Saskatchewan, occupies a leading position. The welfare and progress of any community in Western Canada depends on the productiveness of the land in the district surrounding it. No city there can hope to grow in importance unless it is backed by a fertile territory capable of raising large quantities of grain. Regina bases her principal reason for existence on the wealth of her surrounding territory. The district raised 3,692,000 bushels of wheat in 1905, an average of 27.35 bushels per acre, and 2,729,000 bushels of oats, an average of 53.89. This year the estimated yield of wheat is 4,133,000 bushels, an average of 27.33 bushels per acre, and the estimated yield of oats 3,000,000, an average yield of 53 bushels per acre. These figures are taken from the official Government reports, and are regarded as accurate. The growing wealth of the Regina district is reflected in the progress made by the city, and every branch of commercial activity has shown remarkable advances within the past five years. The prairie hamlet, as it was known at the beginning of this century, has developed into a lively and progressive city, the largest, with one exception, between Winnipeg and the Pacific Coast. As the capital of the Province of Saskatchewan, it is the heart of the political, judicial and educational systems.

Basis of Importance.

But this is to some extent an artificial aid, and as such is not to be considered among the elements constituting the city's importance. It is the commercial supremacy which has made the city what it is. Strong evidence of this can be furnished by a study of statistics. The population, for instance, has grown from 2,645 in 1901 to about 10,000 in 1906, an increase of nearly 300 per cent. in the five years. The assessment of 1906 is $7,100,000 against $1,226,000 in 1903, a gain of 400 per cent. in three years. The post-office revenue for the last fiscal year was $35,000 against $8,000 five years ago, and the Customs receipts were $144,000 against $51,720 three years ago. Figures of other important branches of the commercial life are not so easily available. It is estimated, however, that the railway revenue at Regina in 1905 was $2,000,000, of which $1,500,000 was in freight receipts. The city has eight banks at present, compared with two in 1901, and it is estimated that the increase in banking business in that time has been 600 per cent.

A Steady Growth.

The growth has been steady and even, without booms or reactions. In each year the volume of trade has shown a substantial increase as compared with the preceeding year, and this fact has inspired the commercial world with firm confidence in the city's future. Manufacturers of agricultural implements, who are dependent upon the success of farming communities, have definitely cast in their lot with Regina by establishing their distributing depots for Saskatchewan in that city. This is the most important branch of the wholesale trade at the present time, and it is estimated that the volume of business in implements for the present year will be $6,000,000 as compared with $4,000,000 in 1905. Several warehouses, handling the various general lines, are also doing a profitable business, and the National Drug Co. has made arrangements for opening a large branch there in order to take care of the trade of the middle West. Other important concerns are now looking over the ground with a view of opening establishments.

Welcomes Manufacturing Plants.

It is towards the sphere of manufactures, however, that Regina's interest is chiefly directed at the present time. There is no doubt that articles manufactured in Western Canada will always have the call among the Western consumers, other things being equal. This species of local patriotism is attracting the attention of many firms which are doing business in the prairie Provinces, and for this reason several Eastern manufacturers are considering the advisability of establishing factories in the West. The problem of a possible location is determined largely by the facilities and inducements which a city or town offers. In this connection Regina is ambitious. She considers herself the natural commercial centre of the Province, and she is prepared to maintain that position. She has for many years been the chief railway point of the Canadian Pacific Railway between Brandon and Calgary, and recent developments have accentuated her importance from the standpoint of transportation. Mackenzie & Mann, the owners of the Canadian Northern Railway system, have purchased the Qu'Appelle, Long Lake and Saskatchewan Railway, which runs from Regina to Prince Albert, with the intention of securing a portion of the trade which radiates from the capital. They have surveyed a line from the Manitoba boundary westward to Regina, and will lay the rails as soon as the necessary labor and material can be procured. This will give them a loop around the most important portion of the Province, with Regina as a central point in their line. The Grand Trunk Pacific has, through General Manager Morse, announced its intention of building three lines to Regina, thus making that city the centre of the southern portion of its system. One of these lines will run to Yorkton to meet the main line, the



OF REGINA

second will run to Brandon, and the third to North Portal, on the American boundary. The Great Northern, or Hill system, which will enter Saskatchewan from North Dakota, is also expected to contribute materially to the strength of the city's railway position. The plans of Mr. Hill have not yet been announced, but it is confidently believed that he will build through Regina on his way to Edmonton.

Class of Industries Desired.

The industries which Regina is most anxious to secure are those which will find their raw material at her doors. These include flour mills, cereal mills of various kinds, vinegar factories, distilleries, flax mills, oil mills and similar enterprises. The extensive cattle ranges of the Province furnish raw material for packing establishments and their allied industries, such as tanneries, soap factories, glue factories, and other concerns which make use of the bye-products of the packing plant. The principle of generous municipal assistance does not receive enthusiastic support in Regina, but it is realized that some measure of aid might be granted in order to encourage manufacturers to come in at once. It is likely that heavy inducements would be offered to industries which can obtain their raw material in Saskatchewan. But manufacturers of all kinds will be heartily welcomed. They are wanted in Regina in preference to any other class of people. The industries now located include a flour mill, sash and door factories, an abattoir,



THE NEW CITY HALL

brewery, mineral water factories, cigar factory, machine shops, and a large number of smaller enterprises.

The city council has reserved for manufacturing and warehouse sites forty blocks, or 1,600 lots, in the north-east portion of the city. There are in addition ten blocks, or 400 lots, along the Q.L.L. and S. Railway, the line recently acquired by the Canadian Northern. Sites are available at very low prices, and a manufacturing concern could secure a free location upon giving certain guarantees as to the amount of capital and labor which would be employed.

The Fuel Supply.

The reopening of the Souris coal mines at Estevan improves the position of Regina with regard to fuel. This coal



New Post Office, Regina

can be laid down in the city at about $4 per ton in large lots, and it serves very well for the generating of steam. It is likely, however, that the city's electric light plant will furnish power for a great many of the industries of the future, and additional apparatus is now being installed for the purpose of supplying electrical energy for manufacturers. It is anticipated that this can be delivered at a cost of not more than $60 per horse-power per annum. At such a figure it would be a most profitable motive power, particularly for smaller enterprises.

Industrial Alcohol.

The possibilities attending the use of industrial alcohol are also attracting a good deal of attention. This material can be produced, it is estimated, at a cost of not more than twenty cents per gallon in Regina, and at that price it would be a great incentive to the development of manufacturing industries. The action of the Dominion Parliament with reference to the removal of the inland revenue tax on this commodity is being awaited with interest.

PRISON LABOR—A Problem in the Industrial Field

Shall Prison-made Goods Compete with Articles Manufactured by Free Labor?

HOW to keep convicts employed without unfairly affecting free labor or manufactures is a problem which is now occupying the serious attention of the thinking public. The problem presented is concisely this: We have a number of men, women and children confined in prisons and penitentiaries for various periods. The expense of these institutions is large. How are the inmates to be cared for that they may be in the best position to earn honest livelihoods when they are liberated? It is agreed that work must be provided for them. Not only for economic reasons is it necessary to have the convicts producing something, but on the moral side, enforced idleness would be completely destructive to the future welfare of the prisoners.

It then becomes necessary to decide upon some labor which will have a beneficial effect on the worker, and yet will not disorganize existing industrial conditions. Other things being equal, such labor would consist of that to which the convict is most adapted, and at which he will be most likely to find employment after he is released.

Keeping this fundamental object in view, we must then consider the other interests which are affected by prison labor and the methods which have been tried to overcome the difficulties which have arisen.

Systems Now in Force.

Generally speaking, there are six systems in use on this continent, not all of which, however, have been tried in Canada. These are: (1) The Lease System, (2) Contract System, (3) Piece-work System, (4) Public Account System, (5) State-use System, (6) Public Works System. Of these the first is generally discredited. All the others are more or less familiar in this country. The second is now in force in the Central Prison, Toronto, where a contracting company supplies the raw material and superintendence of the work, and pays the Government for the labor on a combination of piece-work and rate per hour principle. The Government supplies the building, machinery, guards, etc., and looks after the discipline. In the piece-work system a contractor buys the product of the prison factory at so much per piece. The fourth system was formerly in force in Ontario, and consists in the Government itself operating a manufacturing plant with prison labor and marketing the product. Under the fifth system the convicts make articles for use in public institutions, and the last consists in work on roads, public buildings, canals, etc., for the public benefit.

Preferable from Industrial Standpoint.

From the point of view of the industries of the country the last two systems, namely, State-use and Public Works, are preferable. In the first of these the labor would be spent exclusively in manufacturing goods for public institutions. This would affect existing industrial conditions only to the extent of depriving manufacturers of the sale of such goods. However, as the objection raised is to the disorganization of trade through the putting upon the market of cheap-labor goods, and as this objection would be eliminated by the State use of all prison-made articles, there could be no serious protest raised.

Work on public highways, too, would meet with little opposition from laborers, who would be the only ones interested industrially. Work done on this system is usually such as would not be done otherwise till some future time. This consists in building permanent roadways, canals, etc.

Does Not Solve the Question.

No such easy solution of the difficulty, as these would appear to offer, seems possible however. Otherwise we should have been freed from much of the discussion and trouble of the past few months. In the first place, the confinement of the convicts' labor to the State use is impossible. It must be remembered that convicts, in the great majority of cases, are not skilled workmen, nor have they spent any great length of time in any one avocation. Hence, the work which is most suitable to them and of which they are at all capable is that requiring little skill. Broom and brush making is a favorite employment. Shoe-making of an inferior grade and the lower kinds of woodworking and furniture manufacturing are within their range. Only a small proportion, then, of the public supplies can in any case be provided by prison labor—only those articles which are of comparatively easy manufacture. In the making of these there is not enough work to keep the prisoners employed.

A number of objections are made to the State-use system. In its behalf it is pointed out that the work accomplished is of undoubted utility, and the men are kept out in the open air, which is an advantage. But the work of such a nature, which can be done conveniently near a prison, is limited, and the cost of guarding becomes heavy. Moreover, there is a strong objection to having the prisoners subjected to the gaze of the public. The effect of familiarity is bad for both the public and the convicts. And lastly, it is work which could be carried out only by strong men.

Must Come into Competition.

Thus we are thrown back involuntarily upon work which is going to bring manufactured articles on the market in opposition to goods manufactured by free labor. The amount of this may be minimized; the making of articles for State use and the building of public works may be carried on as far as possible; but when all this is done the problem is still with us, of marketing a certain amount of prison-made goods without disorganizing trade.

Demoralization of prices, it is generally felt, follows the competition of prison-made goods. The reasons for this are obvious. The average work of a convict is inferior to that of a free laborer; it is estimated that his efficiency is about three-fifths that of a free man. Hence, as the product is of a lower grade, lower prices for it must be accepted. To meet the competition, legitimate manufacturers must reduce their prices, and a general deterioration in quality usually follows. Moreover, when a contracting company gets the use of prison labor, the price of it is apparently so low, even though, when all the contingent conditions are considered, it be a fair rate, that other manufacturers are seriously affected. The possibility of the one using prison labor reducing prices below the figure which will give a fair profit when the goods are manufactured with free labor tends to disorganize trade and stifle competition.

Price of Labor Necessarily Low.

Because of the inefficiency of the workers, their lack of interest in their work, the impossibility of getting them to work to their full capacity, the expense of instructing the beginners, the loss of material at this stage, the shortness of the terms of incarceration, whereby the convict is liberated about the time he is developing some skill, because

of all these the value of prison labor is very low. A certain prejudice against prison-made goods also helps to depreciate the value. Hence, whether the work be done by piecework or day labor, the price which any manufacturer is ready to pay is small. To this price must in all cases be added the cost for instruction and a large allowance for spoiled material.

Considering the various elements which enter into the cost, by which the real cost to the contractor is finally fixed, and the impossibility of competitors or the general public estimating this, it seems on the whole preferable that the Government should do the manufacturing itself, and only sell the finished article. In this way, at least, manufacturers would know the extent of their competition, and any unfairness could be rectified by proper representation of the facts to the authorities. When a convict's labor is sold to a manufacturer for three or four cents an hour, it may mean much or it may mean little. Contingent circumstances may make that labor high-priced at the figures mentioned, or it may be low. It is the uncertainty of this which causes much of the demoralization in prices. This element would be eliminated by adopting the Public Account System. Furthermore, the Government might direct its energies to overcoming some unfair condition caused by a monopoly in an article of general use.

Agriculture as a Solution.

A further reduction in the amount of labor devoted to producing goods in competition with manufacturers would result from an extension of agriculture with prison labor. The work is in every respect suitable. It is carried on in a small way in connection with a number of public institutions now, and it is eminently satisfactory. Its advantage, in an industrial way, over other occupations, consists in the extent of the market, which would easily absorb all that could be produced without being in any way adversely affected. Moreover, the products have an accepted market value, and so could be fairly and equitably sold.

Life on the land has an influence, too, which should do much to straighten out the moral kinks of the average transgressor. The ruggedness and law-abiding qualities of the farmer come from a life which is characterized by evenness and moderation rather than by varied sensations and excitement. The same conditions might not be without a like result if the convicts were consigned to a similar life.

A TRIUMPH FOR ARBITRATION.

By arbitration a labor question was satisfactorily settled in Toronto during the past month. The dispute lay between the Toronto Street Railway Company and its employees. When the strike of the employees of the Winnipeg Street Railway was on a number of men were sent from Toronto to operate the cars. When these returned to Toronto and resumed their positions with the company there were objections raised by the union employees. The question was argued with the general manager of the road, but the latter insisted on the right of the company to employ or discharge men at its own pleasure. The matter became further complicated by the interference on the part of some union men with the three alleged strike-breakers. For this they were discharged.

When it became apparent that the two parties could not get together on a common basis, recourse was had to the agreement entered into three years ago between the company and its employees, providing for the arbitration of all disputes. The triumph of this peaceful method of settlement is most satisfactory to all who are interested in preserving good relations between employer and employed. Mr. F. B. Polson, of the Polson Iron Works, and Mr. K. J. Dunstan were named by the company, and Mr. D. A. Cary and Mr. James Simpson were named by the employees, and these four, with the addition, later, of Mr. Justice Mabee, composed the board of arbitration. The merits of the case were gone into thoroughly. Several sessions were held, during which all the evidence bearing on the case was presented. The decision, which was signed by all the arbitrators, has a wide significance as laying down general principles governing the right of employment, which will have a general application. Withal it is a sane judgment, which takes into account the practical conditions affecting the case. The text of the decision is as follows:

> "The railway company, in the management of their road and affairs connected with the company, have the inherent right of engaging and removing employees in their own discretion, without let, hindrance or molestation, subject only to the special provisions of the agreement of June, 1904, and any laws of the land relating to or affecting such employment.
>
> "The railway company were justified in refusing to either dismiss or remove from the cars to some other branch of the company's service the three employees who were alleged to have participated in the Winnipeg strike.
>
> "In making dismissals of employees charged with interfering with the said three men the management of the railway company acted in perfect good faith.
>
> "In connection with the very full and prolonged statements of the facts presented to this board many matters have been elicited that were not before the management of the railway company when the said dismissals were made, and the board believes, after much anxious consideration, that it is in the best interests of all concerned that the company should reinstate to their former positions all the men dismissed.
>
> "No evidence has been submitted to the board upon the question of compensation, and application has been made to open up the case for the purpose of hearing such evidence, and a counter-application has been made to give evidence upon the case in chief for the company, but the board deems the better course to take is to admit no further evidence upon either side, but to leave the matter of compensating all or any of the men to the judgment of the company.
>
> "The company shall pay the expense and charges of the arbitrators appointed upon their behalf, the employees shall pay the expense and charges of the arbitrators appointed upon their behalf, and the company and employees shall bear equally all other expenses, charges and disbursements, including those of the fifth arbitrator."

The award contains a fine exposition of fundamental principles, with a moderation which no one will be inclined to criticize. The document will stand as a tribute to the wisdom and fair-mindedness of the men who sat as arbitrators.

OUR NEW ZEALAND LETTER.

Wellington, N. Z., August 4, 1906.

Through the death of Mr. Seddon, our late Premier, Canada lost one of her best and sincerest friends. Mr. Seddon was a whole-hearted Imperialist, and Canada, Britain's largest possession beyond the seas, was watched by him with great and kindly interest. Her prosperity, her methods of attracting settlers were studied by him as keenly as the development of his own colony, New Zealand, and wherever he could do a good turn for Canada he never failed. Mr. Seddon's preferential tariff scheme has benefited Canada in a way more than Great Britain, because Canada is the one opponent of the United States whose industries have been built upon the same lines, and practically comprise the same variety of manufactures as the United States. In wood pulp, paper and wire nails Canada was the only competitor in the New Zealand market against foreign countries. Both lines are heavily protected through the preferential tariff, and when these two lines were included the interests of Canada only could have been in the Premier's mind.

The policy of Sir Joseph Ward, our prospective new Premier, in this respect is different. Though an Imperialist, he is willing to extend the benefits of the preferential tariff to all comers, provided they give a quid pro quo. From a universal point of view this may be the right course to take, but it will not tend to form a self-contained independent Empire, such as was the object of Mr. Seddon.

I had the good fortune to meet Mr. Seddon on several occasions, and whenever Canada was mentioned he expressed himself in a way which left no doubt of his admiration and his good-will towards the Great Dominion. I fear that the extension of the preferential tariff, which was promised by the late Premier, will be shelved during the present session of Parliament, and it is doubtful whether it will ever find such a strong supporter in the new Ministry as Mr. Seddon. But nothing definite can be said at this moment. Sir Joseph Ward is hurrying home to take over the reins of Government from the present Premier, Mr. Hall-Jones. He is expected to arrive in the colony in the first week of August, when no doubt he very soon will declare his policy.

Sir Joseph returns under very trying and difficult circumstances, and it will want all his tact and statesmanship to retain even a shadow of the power Mr. Seddon exercised. Most likely a new Labor Party will be formed, comprising all the malcontent elements of the present Labor and Liberal Party, strengthened by those sections who are "agin" the Government all the time. The Opposition, which was defeated so badly at the last election, is preparing again for a vigorous campaign, most likely strengthened by those who object to Sir Joseph Ward on account of his religion. On the other hand, there is no one at this moment who could fill the position to the satisfaction of all, and if Sir Joseph Ward tackles his work with tact and firmness he may succeed in winning the confidence of Parliament and the people. The Labor and Liberal Party, which has had such a long spell of Government, will watch his every movement with keen interest.

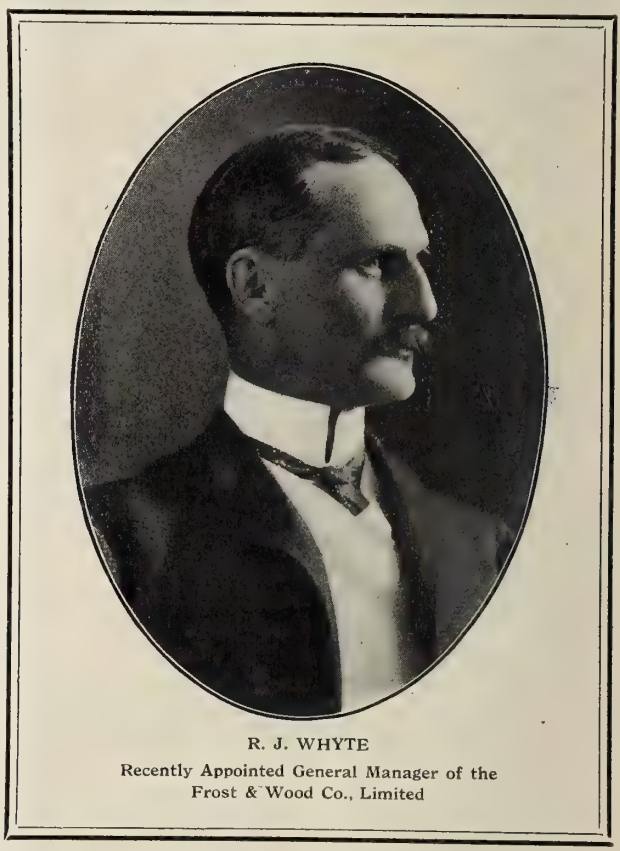
The death of Mr. Seddon has put a damper on many things, and not least on the coming exhibition. Men of his calibre appear only at very long intervals on this planet, and it takes a long time to replace them.

COSMOPOLITAN.

SUCCEEDS TO GENERAL MANAGERSHIP.

Upon the withdrawal recently of Mr. Charles B. Frost from the general managership of the Frost & Wood Company, Limited, Mr. R. J. Whyte was appointed to that position. Mr. Whyte has won the high position he now holds by personal ability. Sixteen years ago he left Cooper, Fairman & Co., now the Dominion Wire Manufacturing Company, to enter the employ of Frost & Wood. Since that time his progress has been steady. Starting in the shipping department, he has passed through every post till he now occupies the chief position in the great manufacturing industry at Smith's Falls.

Since the fire, which practically destroyed the plant of the Frost & Wood Company, the work of reconstruction has called for foresight and executive ability of a high order. Into this work Mr. Whyte has entered with enthusiasm, and



R. J. WHYTE
Recently Appointed General Manager of the Frost & Wood Co., Limited

the new plant, which is now in course of construction, is a tribute in no small extent to his wisdom and energy.

Besides his work in connection with his company, Mr. Whyte has taken a live interest in general industrial progress. As chairman, for the past two years, of the Agricultural Implement Section of the Canadian Manufacturers' Association, he has accomplished much for the betterment of that industry.

Mr. Whyte has now a wider field for his activities. In a position of great responsibility, and with a new and enlarged plant, the possibilities for the exercise of his abilities are widely extended.

H. J. Craig has been appointed commercial agent for Canada to China.

ADVERTISING CANADIAN INDUSTRIES

By J. ANGUS MacDONALD

Author "Successful Advertising—How to Accomplish It."

Preparing a Catalogue

AS a fine cut of roast beef at the King Edward or any other first-class Canadian hotel is the *pièce de résistance* of a good dinner, so is the well prepared catalogue the very spinal column of the manufacturer or wholesaler's mail order advertising campaign.

Nowadays you can get catalogues on all conceivable subjects. Engines, groceries, dry goods, clothing, furnishings, tools, schools, paper, paints, jewelry, leather goods, novelties, etc., etc., are sold by that silent yet resultful salesman known as the catalogue.

Some concerns have built up large businesses simply through the judicious distribution of a catalogue, with allied literature, such as "follow up" letters, circulars and order blanks. A catalogue will help the salesman on the road and visits from salesmen will cause later orders from the catalogue. A catalogue will do business "all by its lonesome," and what's more, it often reaches the customer beyond the visit of the human drummer. As a salesman, a catalogue is economical and effective—a pair of business virtues dear to any business man.

About the Size.

Therefore, let us give some little thought to how the catalogue should be prepared.

There are two ways to commence work on a catalogue. One is to arbitrarily settle on the size and number of pages at the very outset, and to prepare just enough matter to fit the space—*no more, no less.* Another is to go ahead and prepare the matter; when it is all together to determine from the copy and cuts the size of the catalogue. I prefer the latter method.

For the catalogue, like all advertising, should be *an expression of the business,* and the copy with illustrations *naturally* worked up from *resources in hand* is more likely to mirror business offerings and methods than the matter simply selected to fit within a given space. You can tell a better story by not limiting yourself in space at the beginning than if you constantly had your eye upon the "*finis*" which must be on a certain page.

The size of the edition is quite a matter of individual judgment. Each concern is the best judge of its resources and the number of names it can and will reach. Therefore, discussion here regarding quantities to be printed is unnecessary. However, as a reminder, it may be not out of place to state the very evident economic fact, that the greater the edition the less the proportionate expense. It costs exactly as much cold cash to set up type for an edition of one hundred as it does for one hundred thousand. When you get beyond the cost of printer's composition, the only additional charges are for press work, paper, binding, and mailing.

A Suitable Cover.

The cover receives early consideration. Whether it will be printed in one color or in two or more colors is a matter for discussion. Whether a plain type and rule effect (such as any good printer can give) or a "cover design" from an artist be required to embellish the front cover page is also a matter for individual judgment. My fancy runs towards "cover designs," and vari-colored ink effects; for a catalogue should be tasty and handsome in appearance, while as business-like as you please in telling its story of goods and prices. Another point: There is so great a flood of catalogues now travelling through the mails that a catalogue must have *appearance* in order to be even glanced at. The poor, cheap looking proposition comes pretty nearly being always thrown in the waste basket the moment its wrapper is opened. And what is the good of the best catalogue on earth unless placed in proper hands to be read by proper eyes?

Incidental Economies.

The cover pages are usually of heavier and better stock than the inner pages. For inside pages "No. 1 Book Paper" is excellent for the average catalogue; for cover pages consult your printer who will submit a little book showing a variety of colors, weights and qualities of paper. If the book is to be of an extra large size and postage expense (an important item) is to be economized as much as possible, it is well to "shop" with the printer on the matter of thin light paper. I remember once, in preparing a catalogue that cost $4,500 to mail, how exceedingly particular and difficult was the question of getting paper of sufficient lightness and strength so as to enable three cents to carry it. An extra cent's postage meant an extra cost of $1,500! The paper in this case was made to order.

In New York City I once prepared a catalogue that we figured could be carried for a two-cent postage stamp. I hastened with the first copy from the press—uncut edges and all—to the Post-office where it was most carefully weighed. "Three cents," said the clerk. The extra cent meant $250 extra! I took the catalogue back to the printer and had him cut the edges and clip a slight—*very slight*—margin from the top and bottom. I again approached the postal clerk who this time joyfully announced "two cents." The entire edition of 25,000 copies was so clipped and the postage required on each copy was two cents.

Take plenty of time in getting up that catalogue! It is a tedious mental process at best, and requires lots of patience, application and genuine hard labor. It cannot be "thrown together" in a few days. It should be carefully written; with proper illustrations, adequate descriptions, and harmonious typographical layouts. This takes time. And when the matter is all in type it should be most carefully "proofread" for mistakes of all kinds. Errors on prices are likely to happen; they are expensive and mighty few catalogue proofs fresh from the printer are minus mistakes.

Make Catalogue Presentable.

In giving out the work the experienced advertiser does not necessarily give first consideration to the lowest priced printers, engravers, or artists. He gives due consideration to the *quality of their work* as well as to their reputation for *turning out work within the time specified.*

A catalogue is a salesman—nothing more or less. As a salesman it should be well dressed, i.e., it should bear the earmarks of quality that only good artists, engravers, and printers can give. A uniformly neat effect is given a catalogue by having all inside pages set up in about the same style. One style of display type (in as many sizes as good taste dictates) should be adhered to. Among the popular and effective type styles of the day may be mentioned Cheltenham, Ronaldson, Jensen, De Vinne and Condensed Gothic.

In describing goods don't be afraid to tell a full story about your specials. Make your descriptions as interesting as possible. If the reader does not care to read your very complete descriptions he can skip some; but if he wants

to know about details that are lacking please remember that he is not expected to supply omissions. In most cases he cannot unless he troubles himself to open correspondence regarding same. In nine cases out of ten he will do nothing of the sort. He will simply turn to the rival catalogue with generous and interesting descriptions, and *the rival gets the order.*

Pick up Montgomery, Ward & Co.'s; Sears, Roebuck & Co.'s; or T. Eaton's big mail order catalogues and see how completely and interestingly goods are detailed. It will make you hungry to read some grocery items; chilly to read some overcoat statements. Don't be afraid to quote prices.

I will close this paper with a few words regarding illustrations. Pen and ink sketches are good enough for the average dry goods or fancy wares catalogue. "Stipple" work is now used extensively in illustrating clothing. Half-tones give a fashionable finish to garments and wearables. Wood engravings are in demand to illustrate with fidelity jewelry, furniture, machinery, etc. "Cover designs" are, of course, best when drawn by artists who make a serious study of the proposition to be given publicity to. Canada is fortunate in possessing some good commercial artists—this was demonstrated to my own satisfaction while recently doing some catalogue work there.

DEMAND FOR LABOR IN CANADA.

For the purpose of issuing an official and absolutely correct statement giving the labor requirements of the members of this Association, an enquiry circular was sent out on June 28th, 1906, asking particulars regarding help wanted.

Number of manufacturing firms addressed 1,913
Replies received 315
Number of manufacturers requiring help 205
Number of manufacturers not requiring help.. 110
Number of employees required:—

Men.	Women.	Boys.	Girls.	Total.
3,394	1,231	465	1,183	6,273

Previous to this enquiry four other circulars have been sent out giving the following results:—

Reports of Five Different Circulars Re Scarcity of Labor.

	Men.	Boys.	Females.	Total.
March 2nd, 1903, ...				11,104
Jan. 14th, 1904, ...2,123		385	2,189	4,697
June 10th, 1904, ...2,521		859	3,337	6,717
		Women.	Girls.	
Feb. 10th, 1905, ...1,329	86	218	114	1,747
June 28th, 1906, ...3,394	465	1,231	1,183	6,273

The section of Canada and the nature of the work for which these 6,273 employees are required is indicated herein. Note that these returns have no reference to the requirements of contractors, farmers or any others except manufacturers who are bona fide members of the Canadian Manufacturers' Association.

Classified Statement.

	Men.	Women.	Boys.	Girls.
Agricultural Implements:—				
Blacksmiths	15		4	
General	6		3	
Biscuits and Confectionery:	26	36	21	158
Boots and Shoes:				
General		29		
Rubber	30	20		12
Brewery:	62			
Brooms and Brushes:		12		
Canners:				15
Carriages:	4			
Clothing:				
Cotton garments	24	335	4	489
Woollen garments	76	178	18	130
Cottons: 122		165	20	50
Enamelled and Tinware	6	100	62	
Flour	60	60	5	
Iron and Steel:				
Blacksmiths	52		1	
Boilermakers	60		6	
Machinists 448			15	
Moulders 178			12	
Stovemoulders and mounters ..	66			
Toolmakers	57			
General	74		31	
Jewellers and Silversmiths:	35		7	16
Leather and Manufactures:				
Tanners and finishers	13		8	
Harness makers 110		12	13	
General leather goods	5			
Pianos and Organs:				
Cabinet work	18			
Pork Packers: 140		10		
Printers, Lithographers and Engravers:				
Lithographers	4	2	3	2
Engravers	9			
Bookbinders	8			15
Printers	8			
Rubber Goods:	50	150	25	100
Tobaccos and Cigars:	85	10	20	20
Woodenware:				
Carpenters	29			
Cabinet makers 118			11	
Furniture makers & upholsterers.	57	20	115	
General	59		6	
General lumber mills 440				
Woollens:				
Carpets	5			10
General	56	14	15	20
Miscellaneous: 130		78	30	146
Laborers: 649			10	
Totals 3,394		1,231	465	1,183
Grand total				6,273

Of these, 3,318 were wanted in Ontario, 1,665 in Quebec, 780 in the Maritime Provinces, 358 in British Columbia, and 152 in Manitoba, Alberta, and Saskatchewan.

Proceedings of Commercial Associations.

A number of annual reports of Chambers of Commerce in various parts of the Empire have been received at this office during the year. The report of the Liverpool Chamber contains a reference to the visit of the Canadian manufacturers and an acknowledgment of the receipt of a souvenir booklet from Mr. W. K. George on behalf of the excursionists.

The report of the Edinburgh Chamber also makes mention of the visit, with the programme carried out during the excursionists' sojourn in that city.

The Hong Kong and the Bengal Chambers of Commerce have both issued books containing records of the year's work. They show a wide range of activity and cover the commercial field in those districts thoroughly.

ESTABLISH CANADIAN SECTION.

The following circular-letter has been issued by the British Chamber of Commerce, Paris. It relates to a matter which is of great importance to Canadian exporters:

Gentlemen,—We beg to draw your attention to the fact that this Chamber has organized a Canadian Section to deal with all matters relating to Canadian trade with France.

The committee appointed for this purpose is composed of gentlemen well acquainted with Canadian requirements, and will attend to all enquiries relating to Franco-Canadian business.

We have reason to believe that there is a large field in France for Canadian produce and manufactures, and our object is to ask you to become a member of this Chamber and to take advantage of our long experience of French trade.

The enclosed circular will explain the scope of the Chamber's work and the nature of the information supplied to members.

At all times the manifest advantages afforded by our offices are freely placed at the disposal of Canadian business men visiting Paris.

The annual subscription is $10 or £2—for Canadian members.

Trusting to hear from you in due course.

Yours faithfully,

THE PRESIDENT.

What the Chamber of Commerce does for its Members.

The British Chamber of Commerce, Paris, which has been established since 1872, is a self-supporting body, organized on strictly business lines to promote and defend the interests of its members and of the commerce of the Empire. It offers to its members the experience of thirty-four years of Continental business, and has unique opportunities of affording information on channels of trade, of putting British houses in touch with likely agents, of indicating trade openings and markets, of explaining French methods of business (which, needless to say, differ in many ways from English), and of advising on such important subjects as the best means of advertising and otherwise bringing goods before the French purchaser. The Chamber also obtains for its members information on the commercial standing of French firms. Notice of proposed commercial legislation, Customs regulations, inventions in France capable of interesting British manufacturers, and statistical and general information of all kinds, are transmitted to members, both directly and through the medium of the Chamber's monthly circulars and reports, while members are also entitled to the free use of the Chamber's complete and valuable commercial library. In case of the introduction of a new article into France, the Chamber will, if desired, obtain a Customs classification for its members, thus avoiding the risk of incorrect declaration. The technical information on Anglo-French trade supplied by the Chamber is of incalculable benefit to British exporters, who are often liable to suffer considerable loss and annoyance from their ignorance of these technicalities.

All trade enquiries from French buyers who have orders to place are promptly communicated to the members likely to be interested, and the rooms of the Chamber are open for correspondence, information, etc., not only to members, but to their travellers, when engaged in the business of their firm.

The subscription which is paid for the privilege of membership is small in comparison with the advantages received, while all British business houses interested in any way in French trade will recognize the need of a strong and representative body to maintain and promote prosperous trade intercourse between Great Britain and France. As an influential organization, the opinions of the Chamber are listened to courteously and attentively by the French and British Governments and other authorities with whom it is in constant communication. The greater its membership the more representative it becomes and the greater its power to help British trade. By enrolling themselves as members of this Chamber British houses will materially aid in increasing its status and authority.

Membership of the Chamber further involves a valuable amount of publicity, enables British houses to come into closer contact with a number of their compatriots resident in France, also with French traders, and is, in the eyes of French business men, an evidence of good commercial standing, the status of Chambers of Commerce being higher in France than in the United Kingdom.

In technical or other difficulties regarding Customs classifications or the entry of goods, the Chamber can bring to its members' assistance the influence of a respected and representative public body. We constantly aid British houses in difficulties of this description, and recently had the satisfaction of saving fines totalling about Frs. 10,000 to importers of British produce, thus enabling them to avoid not only a monetary loss, but the stigma of a fine, and consequent friction and dispute between importer and exporter, besides doing much to prevent the repetition of such difficulties.

The Chamber follows closely the course of proposed legislation in France and England. It is in frequent communication with the British Embassy, the Foreign Office, the Board of Trade, and other administrations, and both by direct protest and by resolutions submitted at the meetings of the Association of Chambers of Commerce of the United Kingdom opposes undesirable legislation, in addition to suggesting measures which would be favorable to British trade. The membership of the Chamber comprises several members of Parliament, who are thus well placed for furthering the Chamber's views.

The promotion of a friendly feeling between the British and French peoples has been the constant aim of the Chamber. The visit of the Associated Chambers of Commerce of the United Kingdom to Paris in 1900—brought about by the Chamber's initiative—dissipated many misunderstandings, and more than one statesman, on both sides of the Channel, have borne public testimony to the valuable work done by the Chamber in preserving and increasing amicable relations with a country so closely united to our own as France by the ties of trade intercourse, mutual supply of needs, and geographical position.

The Chamber's monthly circular contains reports of its work, statistical information, a summary of new and proposed French laws, Customs instructions, and other matters interesting Anglo-French trade. Attention may be called to articles which have appeared in the circular on the French Nationality Laws, Registration of Foreigners, Income Tax on Foreign Companies, Law of Association, Death Duties, Cheques, Labor Legislation, Patents, French Rates and Taxes, Employers' Liability for Accidents to Workmen, etc. The annual report of the Chamber contains tables of French trade returns and statistics for the year, with much other commercial data of a practical character.

The Chamber provides means for the settlement of trade disputes by arbitration, for which it has established a code of rules.

The annual subscription is Frs. 100 for members having an office or branch of their own in Paris or within fifty kilometers therefrom, and Frs. 50 or £2 sterling for those not having such office or branch. The subscription is due on the 1st January, payable in advance.

MUST ADJUST BY LOWERING RATES.

In its issue of August 4th the "Evening Record," of Windsor, Ont., discusses the discrimination in freight rates to which Western Ontario manufacturers are subjected by the railroads. It enters a protest, fairly, against the scheme of the railroads to adjust the rates by increasing the rates from United States points. The article says in part:

Elsewhere will be found an article setting forth in detail the rank discrimination in railway freight rates to which shippers at Windsor and Walkerville are subjected in favor of competitors in Detroit and points west, including Chicago. The Railway Commission went into an exhaustive consideration of the complaints submitted to them, and, finding discriminations as alleged, gave the Canadian railways ninety days in which to purge their tariff of these inequalities.

There are two ways in which the Canadian railways can make an "adjustment" and acquit themselves of the charge of "discrimination." They can reduce rates on their lines to correspond with those given shippers on the other side, or they can get their heads together and agree to raise rates on the other side to correspond with those in Canada. In fact, there is a rumor that they contemplate the latter move as a way out. If such be the case, it would be only in accord with their policy of exacting "all the traffic will bear."

It is extremely improbable, however, that the Railway Commission will accept any such means of "adjustment" on the part of the railroads. The present rates from United States points are established, although lower than the rates from here, and are practically acknowledged by the roads to be high enough. Furthermore, in any such scheme the railroads on the other side would have to reckon with the Interstate Commerce Commission, a body with wide powers and much more aggressive than the Canadian Railway Commission. It is unlikely that the United States Commission would listen to a rise in rates for any such purpose, especially on goods for export. Such an "equalization" of rates would afford shippers and manufacturers in Canada little if any relief, as the additional freight rates on raw materials of many classes used by the Canadian manufacturer would so enhance the cost of manufacture that the United States competitor would be in a better position to compete with him in Canadian markets.

The time is past for raising, or even maintaining the present freight rates. Canada is growing rapidly into a large manufacturing country, and the railroads that are getting the goods to haul should not forget that every advantage given the Canadian shipper to compete with the foreign competitor is a step in the direction of increasing the traffic in Canadian manufactures over Canadian lines. Manufacturers are unable to get as good prices for their manufactures as they did fifteen or twenty years ago, and the railways should not expect to maintain rates that have long since become almost prohibitive to Canadian manufacturer and shipper, while having the tendency to divert the business to the United States competitor.

Windsor's industrial poverty and its cause is frequently a matter of comment, and it would be an interesting subject of enquiry as to just how much this condition is due to this discriminative rate tariff. It is very probable that even Walkerville, busy as it is, would to-day be much better off industrially but for this serious handicap to transportation.

When the Railway Commission sat in Windsor a few months ago their attention was pointedly drawn to this unfair discrimination, not only by the parties interested, but by Hon. Speaker Sutherland, the member for this constituency, who described the freight rate matter as a hardship of long standing.

THE CARPENTERS' STRIKE.

Industrial agitation developed in a number of quarters during August. In Toronto the strike of the carpenters interfered with building operations to a considerable extent. An increase of wages and an eight-hour day were the demands. An association of employing carpenters has been in existence for some years, and they have consistently refused to deal with the union as a body. No discrimination has been made against union men; the fact of their being members of a union has just been ignored. It is pointed out incidentally that only one-quarter of the carpenters in Toronto belong to the union.

After the strike had been in progress for a week a new organization of builders, outside the Builders' Exchange, came to an agreement whereby certain of the demands of the strikers were granted, while the right of non-union workmen to the free exercise of their trade was recognized. The agreement contained the following articles:

(1) The agreement to begin now, and to expire on May 1st, 1908. (2) If any change is desired by either party at the expiration of the term, notice to be given by 1st of February, 1908. (3) Eight-hour day, from 8 a.m. to 5 p.m., except Saturdays, 8 to 12 a.m.; work done outside of those hours and on holidays to count as time and a half; hours for mill hands not to exceed nine hours per day, except Saturday, when work to end at noon; a minimum wage of 33 cents per hour; wages of men who are incapacitated by age or physical disability from doing full work to be determined by mutual agreement, subject to Carpenters' Executive. (4) An hour granted for grinding tools when quitting work. (5) Unions not to interfere with non-union men in any way, nor to coerce them to join the union, except by moral suasion. (6) Employers to give preference in hiring men hereafter to union men, if qualified.

The fifth clause distinctly marks the recognition of the open shop. The sixth may be used as the basis of future trouble. However, the prospect of settled conditions till May, 1908, will prove beneficial to building operations in the meantime.

BOOKLETS AND CATALOGUES.

The James Smart Manufacturing Co., Limited, Brockville, Ont., have issued a booklet on the Kelsey system of heating. The complete method carried out under this system is described, with illustrations of the various parts of the generator.

The Thomas Organ and Piano Co., Woodstock, Ont., have issued a catalogue of piano and organ stools and benches. The booklet is well illustrated, and covers the field completely.

The Canada Carriage Co., Brockville, Ont., have issued a fine catalogue for 1906-7. The booklet is well designed and printed. A complete range of sleighs are illustrated, with descriptions. Some novel ideas are worked out in the production of the catalogue which make it very attractive.

The opening of the new factory of the Durham Rubber Company in Bowmanville last month was the occasion of much enthusiasm. The plant was visited by a large number of citizens, who were much pleased with the new industry. A banquet was held in the evening at which the heads of the company spoke of the excellent record in the past and the prospects for the future.

AMONG THE INDUSTRIES

David Jacobs will build a planing mill and sash and door factory in Stratford.

Canadian Bearings, Limited, are considering a proposition to establish a plant in Woodstock.

The West Indian planters are considering the advisability of establishing a refinery in Canada.

The Peterborough Shovel and Tool Company are building a new warehouse, 100 by 40 feet.

The Waterloo Manufacturing Company will build a large storehouse and factory in Portage la Prairie.

A cheese factory, owned by Archibald Knipe, near Stratford, was burned on August 12th. The loss amounted to $25,000.

The Jervis Cartledge Woolen Mills were destroyed by fire on August 9th. The loss is about $16,000, partially covered by insurance.

Cincinnati capitalists, interested in the manufacture of engine packing, were in Hamilton last month looking over sites for a Canadian factory.

Hewson Woolen Mills, Limited, are erecting a $25,000 brick addition to their plant. It consists of a building 200 by 50 feet, three storeys high, with basement.

The Sutton Lumber and Trading Co. are completing a new mill at Mosquito Harbor, B.C. They are also contemplating the erection of a mill at Friendly Cove.

The St. George, N.B., Pulp and Paper Company's lumber mill and lumber estimated at a million feet were destroyed by fire on August 2nd. The loss is estimated at $25,000.

Some Hespeler capitalists are considering the establishment of an iron-working plant in Galt. The Galt council think favorably of extending a loan to the new industry.

The cement brick works in Medicine Hat, Alta., are now in full running order. Messrs. Schram & Brown are operating on a patent process, which they control for Alberta.

A hat manufacturing establishment will be started in Galt in the building formerly occupied by the Williams Shoe Company. This building belongs to the municipality.

Baker & Morrison's flour mill and elevator at Wallaceburg, Ont., were destroyed by fire on August 12th. The loss is estimated at $20,000.

The new factory being erected by the London Canning and Evaporating Company, of London, Ont., is completed. It has a large capacity, and will handle much corn and tomatoes.

The Vancouver Portland Cement Company's plant at Tod Creek is being increased by the addition of a new kiln. This will raise the capacity of the mill from 600 to 900 barrels per day.

A provincial charter is being applied for by a number of Peterborough capitalists under the name of the Peterborough Steel Rolling Mills Company. The proposed capital is $200,000.

The plant of the Diamond Park Mineral Water Company, Arnprior, Ont., was totally destroyed by fire on August 13th. The loss was $5,000, about half covered by insurance. A new building will be erected at once.

A representative of the Montreal Boot and Shoe Manufacturing Co. has been looking into the possibilities of Moose Jaw as a location for a factory. If the proposed plant is established it will employ about 200 hands.

The Page-Hersey Iron and Tube Co., Limited, of Guelph, has been reorganized, with the addition of considerable new capital. The new company, which takes over the business, has an authorized capital of $2,000,000.

The Berlin Machine Works, of Canada, Limited, have been incorporated with a capital of $500,000. This is the Canadian branch of a Beloit, Wis., manufacturing company. The new plant will be located at Hamilton.

Harry E. Winter, of London, England, is in Canada representing an English syndicate which is interested in the manufacture of ammonal. A number of factories for the manufacture of this explosive may be started in Canada.

The Ontario Wind Engine and Pump Co., of Toronto, are increasing their business in the Far East, and have just shipped thirty air-motor outfits to the Levant. The export business of this firm has shown a steady development.

The York and Sunbury Milling Co. are making extensive improvements to their plant at Gibson, N.B. The new mill, when completed, will have a capacity of 7,000,000 feet per season, and will provide employment for about fifty men.

A large cheese factory has been put in operation at Langley Prairie, B.C. This is the first time that this industry has been attempted on a large scale in British Columbia, and the results will be watched with interest.

The Canada Furniture Manufacturers, Limited, are negotiating with Woodstock with a view to building a new factory in that city. If the arrangements as now outlined are adopted a fine plant will be established, employing over 600 men.

The Robbins Irrigation Co., an English company, is reported to be about to spend a large sum in irrigating lands near Medicine Hat. The land is suitable for beet culture, and a beet sugar mill and vegetable canneries will be erected as part of the enterprise.

Chatham, N.B., is to have a big rossing mill. The Miramichi Lumber Co. are building one of the most complete mills in Canada, fitted with modern machinery, and it will handle 400 cords of lumber per day and prepare them for pulp. The mill will cost $75,000.

The big mill of the Western Canada Mills Company, who have already mills at Brandon and Goderich, Ont., was opened by Premier Roblin during the month. The new mill has a capacity of 4,000 barrels per day, which means the consumption of six million bushels of wheat annually.

The Peterborough Steel Rolling Mills Co. will establish a plant in Peterborough if they get a grant of a site and a fixed assessment for ten years. The company will manufacture sheet steel, ploughshares, pitchforks, etc., from old steel rails, etc. The company's capitalization is $200,000.

The Wallaceburg sugar factory is to be increased by the addition of a pulp dryer. Dried pulp in Germany sells at from $17 to $24 a ton as feed. This pulp has not hitherto been used. The saving under the new system will be considerable.

Representatives of the Adjustable Boiler Flue Company are negotiating with the town of Portage la Prairie for the establishment of a factory. The company is capitalized at $60,000, most of which is already subscribed. If granted privileges in the matter of exemption from taxation the company will erect a brick building 80 by 200 feet, and will employ between 75 to 125 men.

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the name of enquirers, apply by number to the Secretary, of Toronto.

1 **Agencies.**—An experienced salesman and successful traveller, speaking four different languages, with extensive offices in **Berlin, Germany,** would like to hear from Canadian manufacturers who desire to be represented on the Continent. Excellent bank and commercial references supplied.

2 An experienced commercial traveller, speaking fluently English, French and German, is prepared to represent Canadian manufacturers of all kinds of building wood, paper, pulp and canned goods, who desire an opening in the **British or European** market. References exchanged.

3 A correspondent in **Sydney, C.B.,** who has just opened up in business as a commission merchant, seeks the representation of Canadian manufacturers desiring to enter that market. Bank references are supplied.

4 **Bone Meal, Hoof and Horn Waste, Meat Meal and Shoddy.**—Enquiry is made for the above lines by a large dealer in chemical fertilizers in **Paris, France.**

5 **Bookbinders' Supplies, Souvenir Postcards.**—A correspondent in **Denia, Spain,** dealing in souvenir and fancy goods, asks to be supplied with samples and quotations on the above line of goods by Canadian houses.

6 **Box Shooks.**—Large **North of England** confectionery firm desires immediate quotations for box shooks:—(side) 28⅝" x 42" x ¼", (ends), 11⅜" x 6" x 7-16", with tops and bottoms to match, and 4 wood laths for each box 12 inches by 2 inches by 7-16-inch.

7 **Buggies, Harness and Farm Implements.**—An old-established firm in **Greenock, Scotland,** at present doing an extensive trade in Canadian agricultural machinery, and possessing excellent facilities for introducing new goods, are prepared to handle the above lines on a commission basis.

8 **Butter and Cheese.**—A **South African** firm of produce importers holding good bank references desires to get into communication with a Canadian exporting firm of high grade butter and cheese.

9 **Cars and Rails.**—A party in **Curacao, D.W.I.,** is prepared to purchase electric, steam or horse tramway cars, with a capacity for 20 persons, also 18,000 ft. of 30-lb. steel rails, with necessary complement of bolts, plates, etc. Prices to be quoted f.o.b. New York.

10 **Clothes Pins, Washing Boards, etc.**—A **Birmingham, England,** firm wishes to purchase wood clothes-pins, washing boards and broom handles.

11 **Clover Seed,**—A **German** firm is desirous of corresponding with Canadian seedsmen who are in a position to export clover seed (red clover, alsyke, etc.), in large quantities.

12 **Cooking Utensils (Aluminum).**—A firm in **London, England,** which is prepared to purchase the above for cash, asks to be supplied with illustrated price lists in duplicate, and best export quotations.

13 **Dried Fish.**—A firm in **Bari, Italy,** reports a good opening for Canadian dried fish in neighboring markets, and would be pleased to hear from Canadian shippers wishing to develop this trade.

14 **Evaporated Apples, Canned Fruit and Canned Lobster.**—An important firm in **Copenhagen, Denmark,** in business as wholesale commission agents, would be glad to hear from Canadian shippers of the above.

15 **Evaporated Apples, etc.**—An **Antwerp, Belgium,** firm, desirous of extending their business relations with Canada have requested to be furnished with names of Canadian exporters of evaporated apples, apple waste and cereals.

16 **Flour, etc.**—A **South African** importing merchant desires to get into communication with a Canadian exporter of flour, maize, bran, etc.

17 **Graphite, Matte, etc.**—A **Manchester, England,** firm interested in the importation of high grade graphite, nickel and copper matte, and other minerals, desires to correspond with Canadian producers and exporters.

18 **Grinding Machinery.**—A **New Brunswick** manufacturer of paints would be glad to hear from Canadian manufacturers of grinding machinery, with prices and catalogues.

19 **Hay.**—A **North England** firm of fodder merchants are open for prices of Canadian clover and timothy hay, c.i.f., Bradford. 10 to 20 tons per week can be taken. Quotations are also desired for Canadian barley and oats.

20 **Hog Products, etc.**—A **Halifax, England,** produce firm desires to get in direct touch with Canadian exporters of hog products, small-size cheese, and first quality butter.

21 **Iron Rivets.**—A **Manchester, England,** firm will be glad to get prices of iron and copper rivets from Canadian manufacturers.

22 **Leather.**—A Portuguese merchant in **Georgetown, Demarara,** is in the market for Canadian boot and shoe leather.

23 **Machinery (General), Electrical Goods, Pumps.**—Enquiry is made by a newly established firm of engineers in **Libau, Russia,** for quotations and catalogues from Canadian manufacturers of the above. Correspondents are prepared to purchase small quantities for cash. References supplied.

24 **Maple Mangle Rollers.**—A **Lancashire, England,** firm asks for prices of maple mangle rollers 26 inches by 6 inches bored and finished c.i.f., Manchester, from Canadian manufacturers.

25 **Oatmeal.**—A company in **Cork, Ireland,** will be pleased to hear from Canadian producers of oatmeal of all grades seeking business in their markets.

26 **Pine Sidings.**—A **Lancashire, England,** firm wishes to obtain prices of pine sidings free from knots and thoroughly dry, sizes 12 feet to 16 feet long, 10 inches and upwards wide, and 1½ inches to 2 inches thick, c.i.f., Manchester, from Canadian manufacturers.

27 **Raw Wool.**—A **Liverpool, England,** firm wishes to correspond with Canadian shippers of washed and unwashed raw wool.

28 **Roofing Felt.**—A **Manchester, England,** firm asks for prices of tarred roofing felt, in rolls 25 yards x 32 inches, and 15 yards x 36 inches, from Canadian manufacturers.

29 **Shovel Handles.**—A **Leominster, England,** firm wishes to purchase D shovel handles.

30 **Veneer and Turned Wood.**—An old established **Leeds, England,** timber firm asks for immediate quotations for shipments of ply wood, 3 and 5-ply in birch, maple or oak. Sizes, maximum 60 in. x 42 in. Minimum, 24 in. x 18 in.; also for table legs, newels, balustrades and all descriptions of turned woods.

31 **Wagon Parts.**—A large firm in **Birmingham, England,** wishes to get in touch with Canadian firms in a position to supply wood goods for wagons, spokes, rims, hubs, and timber for shafts.

32 **Wheel Spokes.**—A **Yorkshire, England,** firm is open to receive quotations for wheel spokes; 2 inches to 3 inches, by 28 inches; also for trap shafts duly bent:—

9′ to 12′ long x 2½″ x 1½″,
9′ to 12′ long x 2¾″ x 1¾″,
9′ to 12′ long x 3″ x 2″.

33 **Woodworking Machinery.**—A newly formed company in **Barrow-on-Furness, England,** asks to be placed in touch with Canadian manufacturers of wood-working machinery who are in a position to equip a small cabinet work shop. Cost of outfit not to exceed £320.

Canadian Pig Iron Production for Six Months.

The American Iron and Steel Association's statistics of the production of pig iron in Canada in the first six months of 1906 show a large increase as compared with either of the two halves of 1905. The production in the first half of 1906 amounted to 282,010 tons, against 257,797 tons in the last half of 1905 and 210,206 tons in the first half of that year. The production in the first six months of 1906 was the greatest in any half-year in the history of the Dominion, exceeding by 24,213 tons that of the last half of 1905, the next highest half-year. It was also greater than the production of any whole year prior to 1902.

The production of Bessemer pig iron in the first half of 1906 amounted to 79,051 tons, against 85,418 tons in the last half of 1905, a decrease of 6,367 tons. In the first half of 1905 the production was 63,785 tons. The production of basic pig iron in the first half of 1906 amounted to 135,298 tons, against 103,724 tons in the last half of 1905, an increase of 31,574 tons. In the first half of 1905 the production was 68,378 tons.

On June 30, 1906, Canada had fifteen completed blast furnaces, of which twelve were in blast and three were idle. Of this total eleven were equipped to use coke and four to use charcoal. In addition, one coke furnace was being built on June 30th. On three coke furnaces partly erected on the same date work had been suspended for some time. One coke furnace was also projected at the close of June. The total number of furnaces in Canada in blast for all or a part of the six months was thirteen, of which ten used coke and three used charcoal. One coke furnace and one charcoal furnace were idle throughout the six months.

The C.P.R. Company are commencing to drill for oil near Medicine Hat, Alta. The supposition is that under the natural gas area there is an extensive oil supply. The finding of oil in large quantities would be a great benefit to the West. Nine carloads of oil-drilling machinery have been sent out with an outfit sufficient for drilling to a depth of 3,500 feet.

An open-hearth furnace, a blooming mill and a combined rod and merchant mill will be erected at Dominion, near Montreal, soon. The Dominion Wire Manufacturing Co., Limited, have arranged for the new plant, and are already in possession of a site. The new buildings and plant will call for an expenditure of about $500,000. When in running order the plant will give employment to over 100 skilled men.

The Peterborough Hot Water Boiler and Radiator Company, with a capital of $50,000, will erect a plant in Peterborough if favorable terms are granted by the city. The class of work done would require the employment of highly paid workmen, and the industry will be a valuable asset.

The Time to Plan

This is the advertisers planning season.

First—Your general plan; then the amount of appropriation necessary to carry it to success.

You know the cost of your advertising in previous years, and the result and gain to your business.

You know the **increase** in your **factory output,** the **extent** of **competition** in your line of manufacture, and the mediums of advertising which have brought the **best results.**

From these things you judge what papers to use, and how much money you will expend for the purpose.

YOU WILL NOTICE

By looking over its advertising columns,

The News

is one of the papers always in evidence—when advertising appropriations are made.

It Forces Recognition

by its wholesome, business-like make up, the absence of waste in its circulation, and the very high opinion entertained for it by the people of Canada.

Its Rate

is easy to remember—

4 Cents per Line

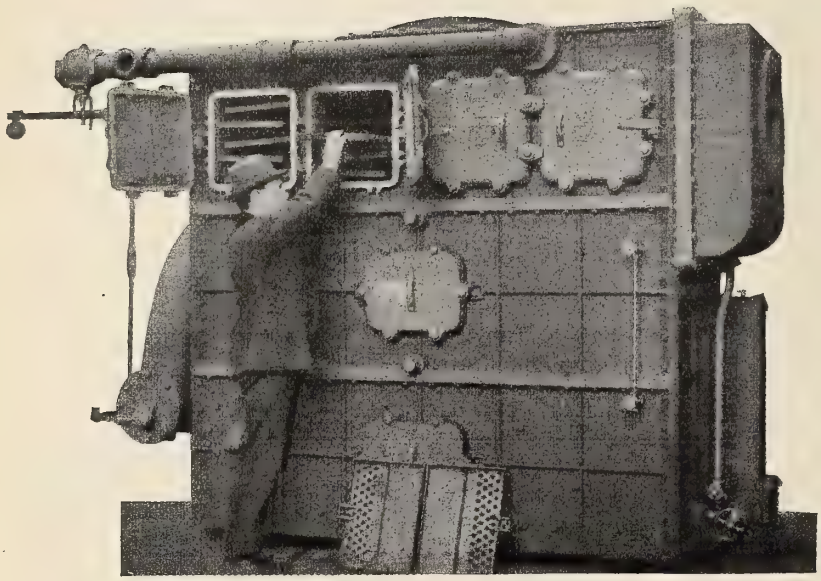
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Prolong life of Boilers, Reduce Expenses, Save Time and Repairs, Eliminate Contraction Strains.

Can be cleaned in half an hour

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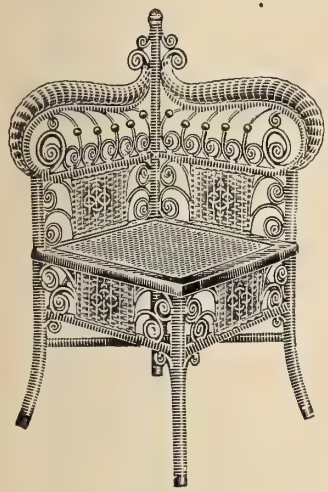
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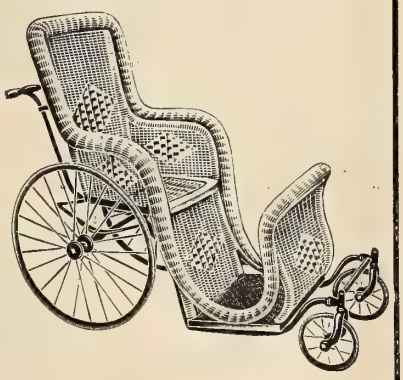
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The Free Press of Winnipeg prints the largest daily newspaper in the Dominion, and carries more advertising—either in the "Want" or display class—than any other Daily paper in Canada. The home of the Free Press is the largest building in the Dominion devoted exclusively to the Publishing business, and the plant of the Free Press is acknowledged by Newspaper experts to be the most modern, complete and perfect in Canada.

As employers of labor, Newspapers and Publishing Houses have not been considered as ranking with the large Factories and Industrial Establishments of the Dominion. It may therefore interest members of the Canadian Manufacturers' Association to learn how a Publishing business compares in the number of individuals to whom it affords employment with a Manufacturing or Industrial Establishment.

DEPARTMENTS AND NUMBER OF EMPLOYEES

The Free Press in its various departments, and exclusive of its army of outside Correspondents, gives regular employment to a staff, including Carrier Lads, of over Four Hundred, divided as follows:

Business and Executive Departments	42
Editorial and Reportorial Department	37
Foremen and News Press men	13
Engineers and Firemen	5
Caretakers and Janitors	4
Mail Distribution and City Delivery	13
Job Composition Department	50
News and Ad. Setting Department	65
Stereotype Department	11
Carrier Boys, employed exclusively by the Free Press, who earn from $1.25 to $4.00 per week	165
	405

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For interior finish,
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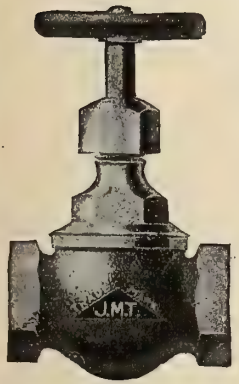
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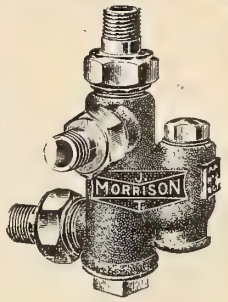
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A strongly built valve for durability, of Best Grade Metal and workmanship.
Renewable copper or Jenkins' disc.
All parts interchangeable.
Full opening through valve.
Stem easily re-packed.
Improved Keyed Stuffing Box prevents nut from coming off in opening and closing valve,
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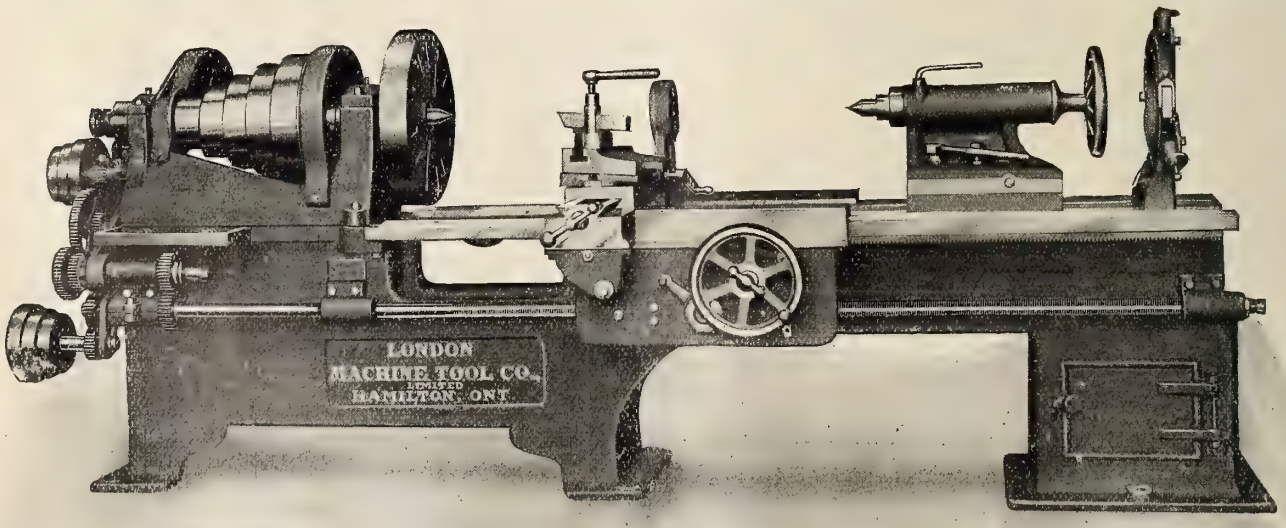
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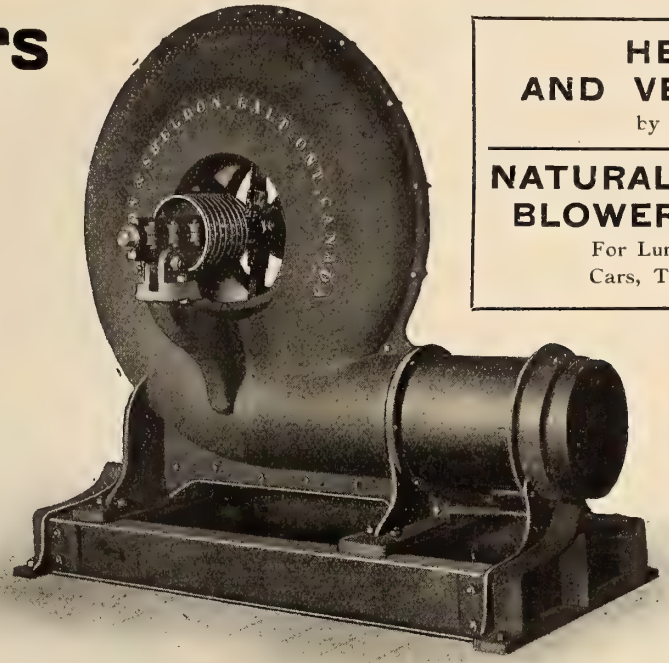
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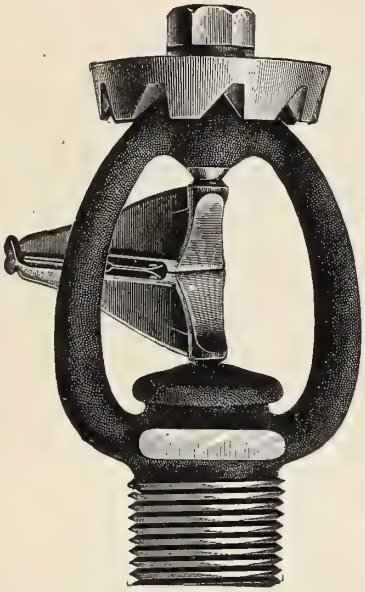
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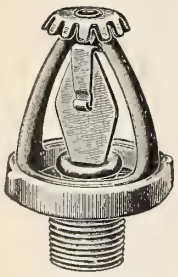
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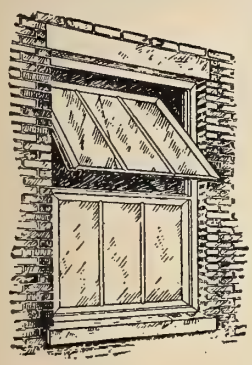
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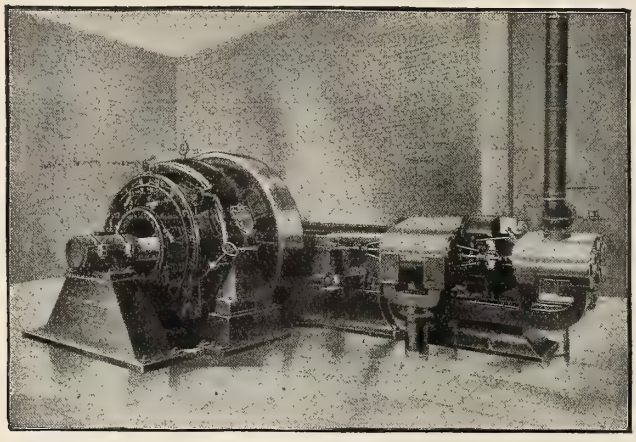
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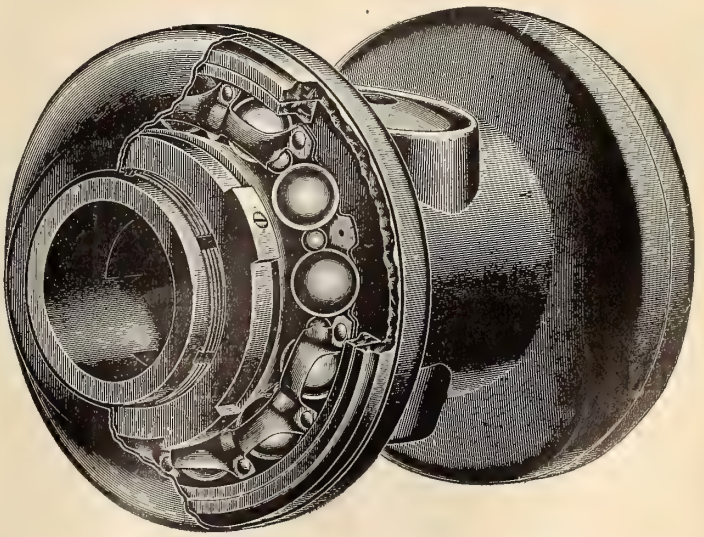
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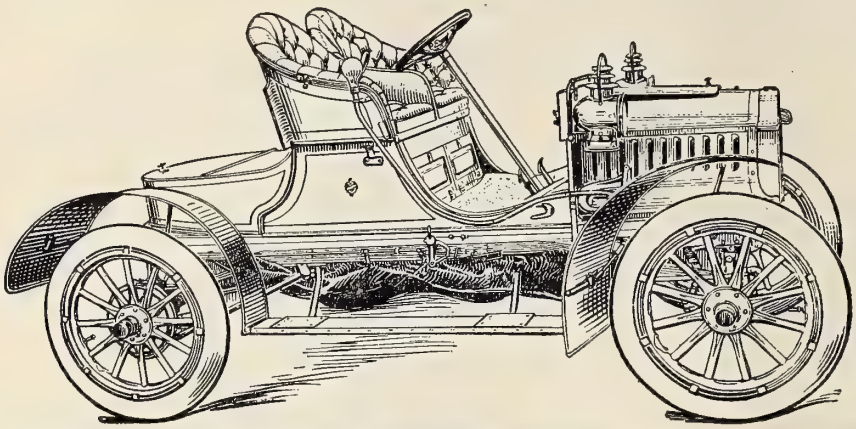
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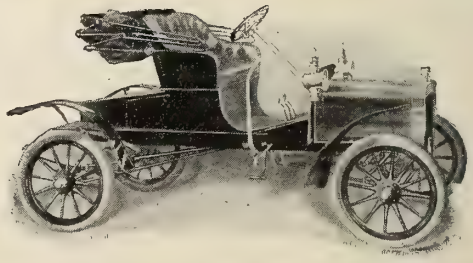
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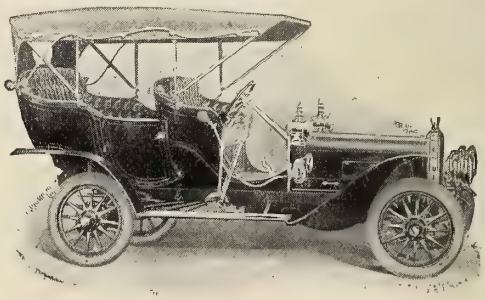
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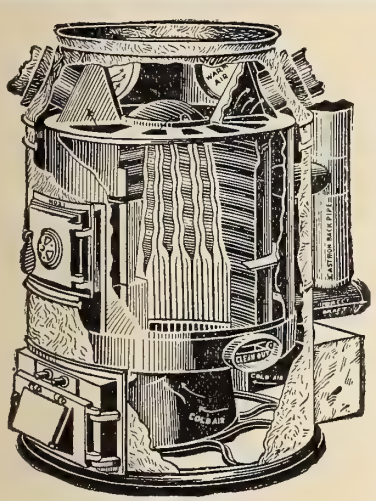
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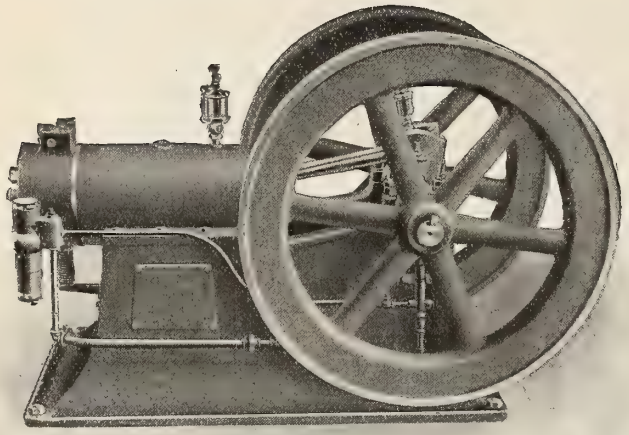
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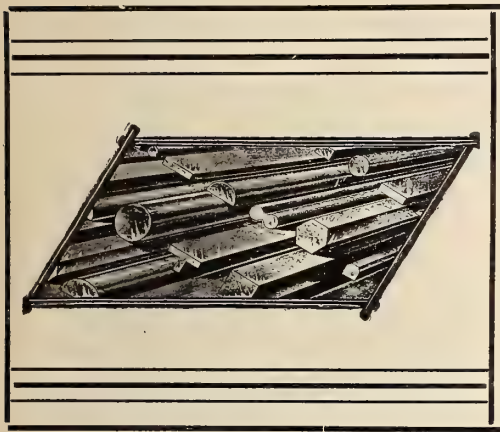
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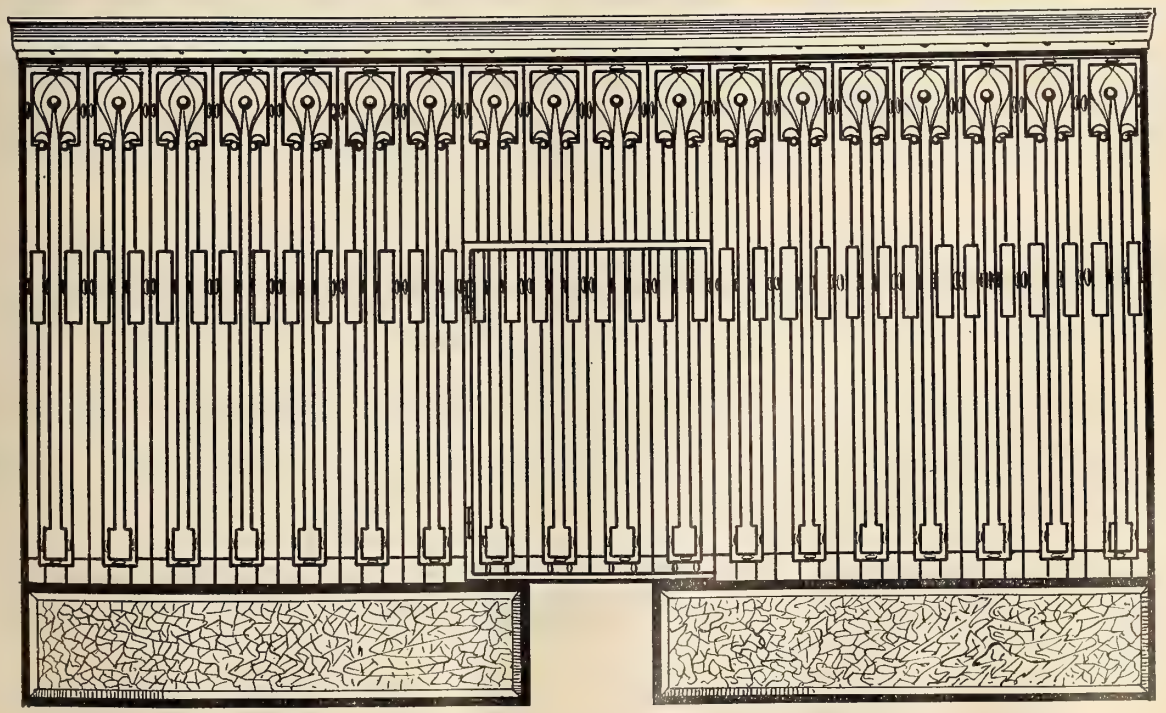
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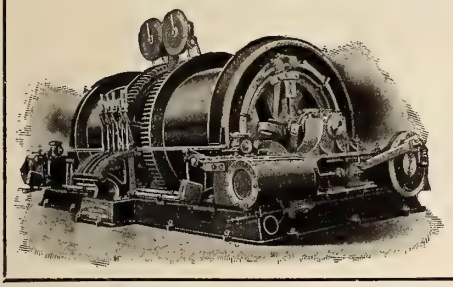
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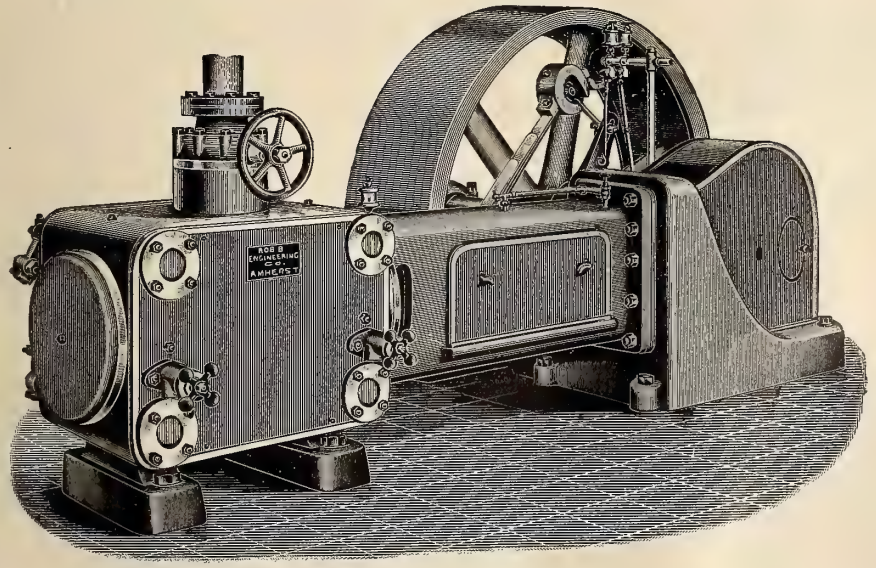
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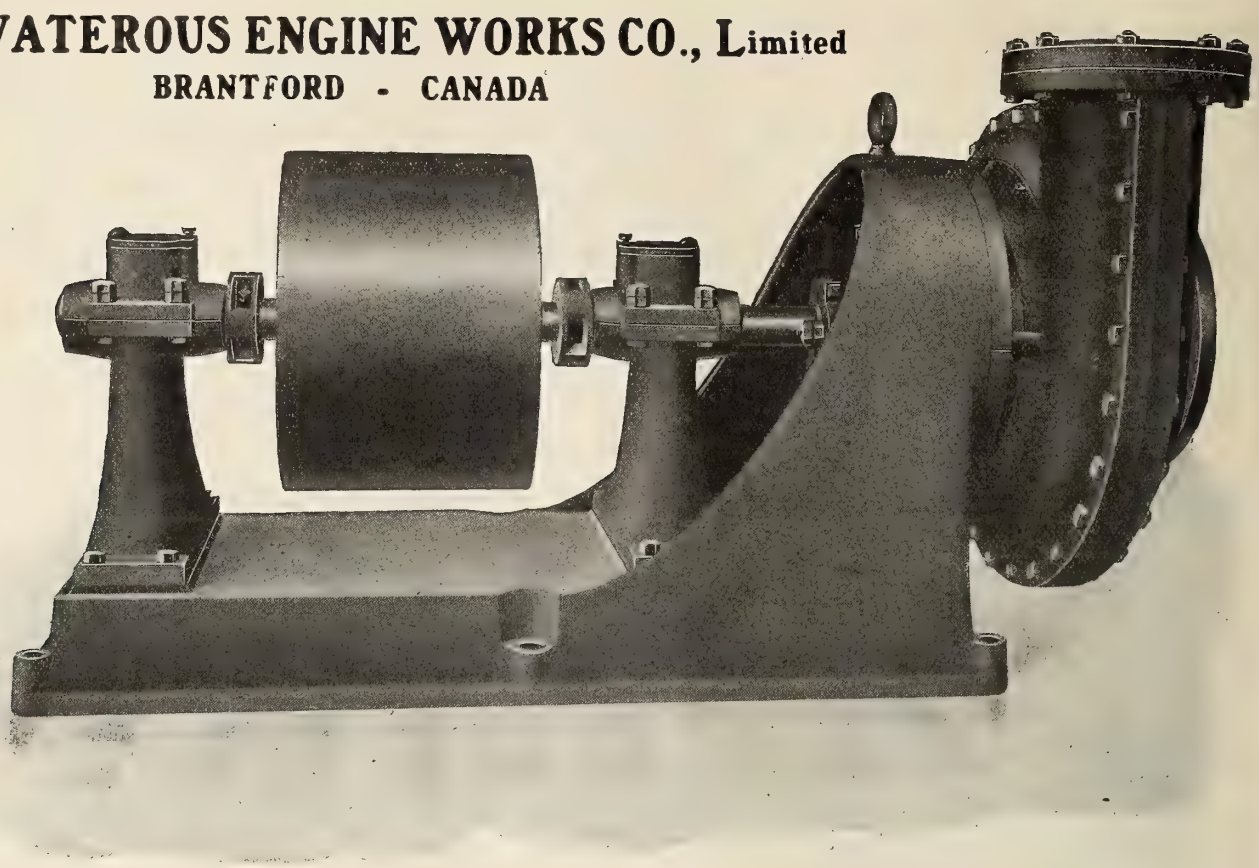
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Rest - - - - - -	1,100,000

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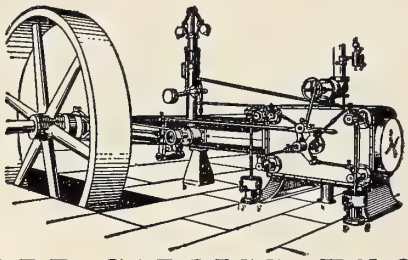
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C. KLOEPFER, ESQ., Guelph
W. J. SHEPPARD, ESQ., Waubaushene
C. S. WILCOX, ESQ., Hamilton
H. S. STRATHY, - General Manager
J. A. M. ALLEY, - Inspector

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Blind River	Lakefield	Stratford
Bridgeburg	Leamington	Strathroy
Burlington	Massey	St. Mary's
Calgary	Newcastle	Sturgeon Falls
Cargill	North Bay	Sudbury
Clifford	Norwich	Thamesford
Drayton	Orillia	Tillsonburg
Dutton	Otterville	Toronto—King and
Elmira	Owen Sound	Spadina Ave.
Elora	Paisley	" Riverdale
Embro	Port Hope	Tottenham
Fergus	Prescott	Waterdown
Fort William	Ridgetown	Webbwood
Glencoe	Ripley	Windsor
Grand Valley	Rockwood	Winnipeg
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Hamilton	Sarnia	Woodstock

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Union Bank of Halifax

Capital Authorized - - - - -	$3,000,000
Capital Subscribed - - - - -	1,336,150
Capital Paid-up - - - - - -	1,336,150
Reserve Fund - - - - - -	1,020,000

DIRECTORS:

Wm. Robertson, *President.* Wm. Roche, M.P., *Vice-President.*
C. C. Blackadar. Geo. Mitchell, M.P.P. E. G. Smith.
A. E. Jones. George Stairs

Head Office: HALIFAX, N.S.

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C. N. S. Strickland, *Assistant General Manager.*
W. C. Harvey, A. D. McRae, *Inspectors.*

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Bank of Toronto and Branches, Canada
National Bank of Commerce, New York
Merchants National Bank, Boston



ESTABLISHED 1849

BRADSTREET'S

Capital and Surplus - $1,500,000

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NOS. 346 and 348 BROADWAY, N.Y. CITY, U.S.A.

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Subscriptions are based on the service furnished, and are available only by reputable wholesale, jobbing and manufacturing concerns, and by responsible and worthy financial, fiduciary, and business corporations. Specific terms may be obtained by addressing the Company at any of its offices.

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THOS. C. IRVING, Gen. Man. Western Canada, Toronto.

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THE ROLLAND PAPER COMPANY,
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Walking, Sulky and Gang Ploughs, suitable for all soils; Land and Lawn Rollers; Scufflers.
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Western Union and A. 1 Code used.

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THE CANADIAN BAG CO., Limited,
MONTREAL.

Bags of every description in Cotton and Jute. Printing a Specialty. Importers of Twine, Hessians, Burlaps, etc.
Cable Address—"Dombay."

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THE CANADIAN OFFICE & SCHOOL FURNITURE CO., Limited
PRESTON, ONT.

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(Registered)
Redwood Lager,
Favorite Brands.
WINNIPEG, MANITOBA.

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Estimates furnished upon application.

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THE NORTON MFG. CO.,
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Fruit, Paint, Lard and Baking Powder Cans. Wire and Bar Solder.
Capacity one hundred and fifty thousand cans daily. Correspondence solicited

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PETERBOROUGH CANOE CO., Ltd.,
PETERBOROUGH, CANADA.
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Australasian Sales Office:
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Coppersmiths and Metal Spinners.
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Manufacturers of Cotton, Jute, Hemp, and Flax Twines; Cotton Rope, Clothes Lines, Fish Lines, Tennis Nets, etc.

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Enameled Sheet Metal Ware; Stamped Ware; Sheet Steel; Galvanized, Japanned and Copper Ware; Stove Shovels; Stove Boards; Oil Stoves; Oilers; Spoons; Lanterns, and Wire Goods.
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REGISTERED C TRADE MARK
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Marble of all kinds for interior decoration and sanitary purposes. Mosaic and tiles. Granite work and granolithic sidewalks.

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THE DOMINION OIL CLOTH CO., Ltd.,
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Manufacturers of Plain and Printed Linoleums and Oil Cloths of every description. Floor Oil Cloths, Table Oil Cloth, Carriage Oil Cloth, Enamelled Oil Cloth, Stair Oil Cloth, etc.
Decorative Burlaps, double sized and oil coated.

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Manufacture Paints, Varnishes, etc.
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Largest Paint and Varnish Makers in the World.
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Merritton and Hawkesbury, Ont.
Merritton Mill—News Paper, Hanging Paper, Wrapping Paper and Building Paper, and Sulphite Pulp.
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Makers of Super Book.
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EXECUTIVE COUNCIL

AUGUST MEETING.

Reports of Officers and Committees—Progress of the Mutual Insurance Companies—Increased Circulation in October for "Industrial Canada"—The Question of Eligibility for Membership in the Association—Decisions of the Railway Commission—An Office in Great Britain—President Ballantyne Thanks the Council.

THE regular monthly meeting of the Executive Council of the Canadian Manufacturers' Association was held in the Board of Trade Council Chamber, Toronto, August 16th, 1906.

There were present: Messrs. C. C. Ballantyne, Montreal (President); H. Bertram, Dundas; F. Birks, Montreal; Geo. Booth, Toronto; H. Cockshutt, Brantford; J. W. Cowan, Toronto; L. V. Dusseau, Toronto; E. J. Freyseng, Toronto; Geo. D. Forbes, Hespeler; W. M. Gartshore, London; W. K. George, Toronto; Jas. Goldie, Guelph; W. P. Gundy, Toronto; Ed. Gurney, Toronto; Lloyd Harris, Brantford; E. G. Henderson, Windsor; J. Hewton, Kingston; R. Hobson, Hamilton; Jas. Maxwell, St. Mary's; J. P. Murray, Toronto; A. S. Rogers, Toronto; T. A. Russell, Toronto; A. Saunders, Goderich; J. H. Sherrard, Montreal; F. J. Smale, Toronto; A. W. Thomas, Toronto; J. O. Thorn, Toronto; C. H. Waterous, Brantford; Geo. W. Watts, Toronto; F. H. Whitton, Hamilton, and D. Wilson, Collingwood.

Communications were received from:

1. The following members unable to be present: Messrs. J. J. McGill, Clarence F. Smith and Robt. Munro, Montreal; Geo. E. Amyot, Quebec; Geo. Sweet, Hamilton; H. Stroud, Paris; Geo. McLagan, Stratford; C. Bermingham, Kingston; J. Turnbull, Thos. Findley, and Geo. Gillies, Toronto.

2. From Mr. Chas. N. Creed, Secretary Maritime Board of Trade, extending an invitation to the President, Secretary and members of the Association to be present at the Annual Meeting of the Maritime Board of Trade to be held at Amherst. This invitation was received with appreciation.

3. From Mr. Dakers Cameron, to the effect that the resolutions approved of at the last council meeting, and to be forwarded to the Annual Meeting for consideration, having reference to steel shipbuilding and the duty on Government imports, were not approved of by the Montreal branch. It was pointed out that when the Montreal branch came to this conclusion they did not understand that the resolution had only been approved pending the action of the Annual Meeting. It was deemed that no action was necessary.

REPORTS OF OFFICERS AND COMMITTEES.

The Secretary reported: (1) That the Montreal and Toronto branches had held their Annual Meetings, and that the Assistant Secretary and Manager of the Insurance Department would be present at the meetings of the Nova Scotia and Quebec branches, which would be held within the next few days; (2) that the auditors had completed their work on the Association books for the year ending July 31st, and the financial statement for presentation to the Annual Meeting would be a satisfactory one; and (3) that arrangements for the Annual Meeting at Winnipeg were well under way, and forty-five members of the Executive had already signified their intention of going to Winnipeg.

TREASURER'S REPORT.

Mr. Geo. Booth presented the report, showing the expenditure for the month of July and for the twelve months ending July. The report was approved.

FINANCE COMMITTEE.

Mr. W. B. Tindall presented the report of the Finance Committee, which recommended for payment the usual monthly accounts. The report was approved.

INSURANCE COMMITTEE.

The report of the Insurance Committee was presented by Mr. W. B. Tindall. The report was approved of as follows:

"The work of the month has proceeded satisfactorily, but the only subject that calls for special notice is the continued favorable responses that have come in from the members in support of the recommendation to endorse the formation of Mutual Fire Insurance Companies.

"In all, 315 members have responded as follows:

277 return agreements, duly signed, promising definite support to the proposed companies in sums varying from $1,000 to $100,000.

33 write, approving the formation of the companies, and promising full support when organized if conditions are satisfactory.

5 write discouraging the formation of the proposed companies.

315

"The 277 members sending definite agreements promise an aggregate insurance in each of the two companies of $2,265,000, of which about $1,250,000 will be available at the outset. Adding support from the members who have written, but who have not signed definite agreements, it is quite apparent that the two proposed companies will have at inception a minimum available insurance of at least $1,500,000 in each company, or three times the sum upon which it was thought the companies might safely commence operations.

"The committee have now concluded that the first organization meeting shall be called at Winnipeg on September 17th at 11 a.m., and thereafter the work of the Department in respect to the sub-standard mutual companies will be terminated.

"The annual report is now in course of preparation. Subject to audit, the excess of expenditure for the year over the revenue of the year is $873.19. The debit, according to the Treasurer's cash statements, differs from this by $293.20, being excess of assets and fees uncollected, but for which credit is taken in the Department's revenue account."

INDUSTRIAL CANADA COMMITTEE.

The report of the INDUSTRIAL CANADA Committee was read by the Secretary as follows:

"Articles for future issues of INDUSTRIAL CANADA were recommended as follows:

"First, a series of twelve articles by Mr. J. Angus Macdonald on different advertising subjects.

"Second, a series of articles by Mr. R. C. Harris on the subject of 'Smoke Prevention.'

"The committee decided to make the October number a special edition, and to publish fully the reports of the

Winnipeg Convention. It was decided that the circulation should be increased to seven thousand copies, and that a special effort should be made to secure advertisements.

"The committee have discussed several times during the year the advisability of catering for British advertising, and are incorporating in the report to the Annual Meeting a suggestion that the Annual Meeting should decide whether or not INDUSTRIAL CANADA should endeavor to secure British advertisements, or whether it should continue as at present, publishing only Canadian advertisements."

RECEPTION AND MEMBERSHIP COMMITTEE.

The chairman, Mr. L. V. Dusseau, presented the report. It recommended the acceptance of twenty-five applications for membership, the names of which are published in another column. It reported fully regarding arrangements for transportation, meetings, and entertainment at the Winnipeg Convention and Western excursion. It dealt with the present by-laws regarding active membership as follows:

"During the past year at almost every meeting of the committee the question has arisen whether or not some of the applicants for membership in the Association were eligible; and confusion has always resulted in too much latitude being given to firms already enrolled as members of the Association. This has resulted in a large number of firms having the impression that any member of the firm could use the services of the Association, while, on the other hand, firms who have construed the membership qualification as it is understood by your committee, have, where more than one person wished to become interested in the Association, taken out additional memberships. The question of representation has been particularly hard to deal with in connection with reservations for the Western excursion. Your committee also think that it is advisable to guard the membership of the Association more closely in future, and limit it absolutely to manufacturers. They accordingly propose that an amendment to the by-laws be submitted at the coming Annual Meeting covering the question of active membership."

This suggestion was discussed very fully, the President, and Messrs. Cockshutt, Henderson, Dusseau, Murray, Hewton, Gartshore and others taking part. Mr. Murray remarked that the recommendation of the committee was right along the lines he had advocated at the last Annual Meeting. The opinion of the members of the council was that membership in the Association should be guarded more closely than heretofore, and that none but bona-fide manufacturers should be admitted to membership. The recommendation was passed on to the Resolutions Committee, to be forwarded to the Annual Meeting.

The Council deemed it advisable for each firm in the Association to nominate who the representative for the purposes of the Association should be, and a motion was carried to the effect that a copy of the by-laws if amended be sent to each member of the Association, and that at the same time they should be asked to designate their representative, or, where they had more than one member in the Association, their representatives.

RAILWAY AND TRANSPORTATION COMMITTEE.

The report of the committee was read by the manager of the Department and, on motion of the chairman, Mr. R. Hobson, was approved of as follows:

"Since our last report to the Executive Council the manager of the Department has visited Ottawa for the purpose of discussing certain matters pending before the Railway Commission before the departure of that body for the West.

Davies Case.

"The Railway Commission has issued its decision in the case of the Wm. Davies Co., Limited, requiring reduction in the rate on packing house products for export between Toronto and Montreal from the present rate of 19 cents to 18 cents per 100 pounds, and proportionate reductions are ordered from all other manufacturing points in Ontario.

Stauntons Case.

"The Commission has also issued an order requiring the issue of reduced rates on wall paper in accordance with its recent decision of the case of Stauntons, Limited. The Department has received a communication from Stauntons, Limited, expressing their appreciation of the work of the Association in dealing with this case.

Cases Pending.

"The complaint of the Kerr Engine Co., Walkerville; the Standard Paint and Varnish Works, Windsor; the Walkerville Brewing Co., Walkerville, and the Wm. Gray & Sons Co., Chatham, of discrimination in freight rates from Windsor and Chatham to eastern Canadian points in favor of United States points, has resulted in the issue of a memorandum by the Railway Commission to the Canadian Freight Association, directing that the discrimination be done away with. The railways are given ninety days in which to submit a scheme for the consideration of the Board which will do away with the discriminations complained of. In this connection the Department has learned that the Canadian railways have been negotiating with United States railways for the purpose of increasing rates from the United States into Canada. No definite particulars are obtainable, and the railway officials approached have been non-communicative. However, in the interests of the Association a protest has been filed with the Railway Commission against the acceptance of any scheme which will involve increases in freight rates. The Board has been informed that the day for increasing freight rates to or within the older Provinces of Ontario has gone by, and reductions are looked for as a result of the complaints which the Board has been investigating.

Minimum Weight of Hogs.

"The negotiations on behalf of the packers with regard to minimum weights for live hogs are progressing favorably, and it is expected that satisfactory reductions in the minimum weights will be arranged in the very near future.

Castor Pins.

"The application to the Canadian Freight Association respecting iron castor pins has resulted in these articles being included in the iron commodity list, and the question of classification will be dealt with later by the Canadian Classification Committee.

Staking Cars.

"The Railway Commission has issued an interim report of its chief traffic official in the matter of complaint respecting staking of flat and gondola cars. In connection with this report the Secretary of the Commission states that the Board has decided to take no further action pending the enquiry in the United States by a joint committee representing the lumber shippers and the interested railways.

Freight Service on Central Vermont.

"The complaint of the Canadian Aluminum Works of unsatisfactory service at Chambly Canton, Quebec, has been adjusted by negotiation with the Traffic Manager of the

Central Vermont, Montreal. A new system of marshalling the freight trains has been adopted so as to ensure despatch to all less than carload traffic.

"Numerous enquiries regarding claims, freight rates and classification matters have been answered by the Department in the usual way."

TARIFF COMMITTEE.

The report of the Tariff Committee, which, in the absence of the chairman, was presented by Mr. W. K. George, and which contained information regarding the exportation of machinery for repairs, was referred back.

BRITISH OFFICE COMMITTEE.

The report of the British Office Committee, presented by Mr. Geo. W. Watts, was unanimously approved of. It outlined the possible ways in which the office would be of service, and made suggestions regarding the necessary expenditure. It was understood that the committee should report to the Annual Meeting.

BRANCH REPORTS.

The report of the Montreal branch was presented by Mr. F. Birks, and the report of the Toronto branch by Mr. E. J. Freyseng. The reports were duly received, and are published elsewhere in this issue.

Before the meeting adjourned, on motion of Mr. Henderson, seconded by Mr. George, it was decided that where possible resolutions to be considered by the Executive Council should be printed and put in the hands of the members of the Council, and that an effort should also be made to have all resolutions in the hands of the Montreal branch so that an opportunity might be given them to express their views before the resolutions came before the Executive Council.

Mr. Henderson enquired as to the progress that had been made regarding parcel post regulations. It was understood that this would be reported on at the next meeting of the Council.

Mr. J. O. Thorn suggested that an enquiry circular be sent to all the Ontario members of the Association for the purpose of ascertaining how they were effected by the new Ontario Assessment Act. This suggestion was referred to the Parliamentary Committee.

Before adjourning the President, Mr. Ballantyne, expressed his thanks to the members of the Executive Council for the way in which they had attended the meetings of the Council, and for the great assistance they had given in the conduct of the Association's affairs during the past year.

The President's remarks were received with applause by the members of the Council.

The meeting then adjourned.

ANNUAL MEETING OF QUEBEC BRANCH.

The Annual Meeting of the Quebec City Branch of the Canadian Manufacturers' Association was held in the rooms of the Commercial Union on Monday, August 20th, at 3 p.m.

Mr. G. A. Vandry occupied the chair, and among those present were Messrs. Pouliot, Moisan, Dechene, Robitaille, Morin, Gosselin, Heaton and Murray.

The minutes of meetings held on April 27th, June 1st and July 13th were read and approved.

The Secretary reviewed the correspondence which had passed between Boswell Bros. and the manager of the Transportation Department relative to certain complaints raised by that company against the service offered by the railroads, urging all members who had grievances of a similar kind to bring them to the attention of the Transportation Department for adjustment.

Chairman's Address.

The chairman then delivered his address as follows:

"Since July 4th, 1904, the date when it pleased you to elevate me to the honored position of chairman of the Quebec Branch of our Association, many months have elapsed without giving me an opportunity of recording some of the important acts of my administration. Nevertheless, as I stated at the time, my poor ability forbade me to aspire to a reign as brilliant as that to which I was called to succeed, that of the worthy founder of this branch, the present Provincial Vice-President, Mr. Geo. E. Amyot.

"Your committee has been successful in defeating the famous Archambault bill respecting compensation for accidents to workmen.

"On several occasions we have endeavored to utilize our influence to better the deplorable conditions existing in our water and fire departments. Unfortunately, little has thus far been accomplished in the way of practical results, but the future administration of the branch is expected to bring these questions to a satisfactory issue.

"The street car service has also been the subject of our particular attention. Recently the Mayor of Quebec informed me that the city solicitor had been instructed to enter suit against the Street Railway Co., and to make it a good test case.

"In the abolition of the trading stamp our branch has generously contributed to the success obtained by the Retail Merchants' Association of the Province of Quebec.

"The most important event of the past year was, without any doubt, the Annual Convention, which took place in Quebec in September last. A special committee was formed to organize a reception worthy of our city, and if we are to judge by the flattering remarks of our guests, as reported in the special number of INDUSTRIAL CANADA, published on that occasion by the Executive Council, the efforts of your committee were not without appreciation.

"We have not made any great headway in the number of members, but at least we have not gone behind, and as to finances, they are very satisfactory, as you shall have occasion to judge from the Secretary's report.

"Gentlemen, I have but flattering words to address to you, relative to the courtesy extended me during my term of office, and in leaving the chairmanship I have but one regret, that of being obliged to tell you that the attendance at the meetings was not as numerous as I should have liked. In an organization such as ours, outside of ordinary routine, officers cannot act effectively nor bring questions to a satisfactory issue unless they are supported by your individual co-operation; and it is to be hoped that the attendance at meetings will be a more prominent feature in the future than it has been in the past.

"Gentlemen, kindly accept my most sincere thanks for the confidence you have shown in me during the last two years, and be assured that it is with deep regret that I leave so honored an office as that to which you elected me."

The Secretary reported the resignation of five members and the acceptance of thirteen applications, a net gain for the year of eight.

Officers Elected.

Officers for the ensuing year were elected as follows:

Chairman, Major Thos. Hethrington; Vice-Chairman, Dr. Ed. Morin; Secretary, Mr. L. Robitaille. Executive

Committee—Messrs. A. A. Dechene, Max. Clement, Jeremie Pouliot, T. Matte and W. H. Wiggs., Representatives to the Executive Council—Messrs. Geo. E. Amyot, A. A. Dechene, Dr. Ed. Morin and W. H. Wiggs.

Review of Association's Work.

Mr. G. M. Murray, the Assistant Secretary, addressed the meeting at some length on transportation and legislation matters, while Mr. E. P. Heaton, manager of the Insurance Department, gave some interesting details regarding the mutual system of fire insurance, and the steps that were being taken by the Association to secure relief from oppressive rates charged by the Canadian underwriters.

NOVA SCOTIA BRANCH HOLDS ANNUAL MEETING.

At the Annual Meeting of the Nova Scotia Branch of the Canadian Manufacturers' Association, held in the Board of Trade rooms, Halifax, Mr. G. M. Murray, the Assistant Secretary of the Association, gave an interesting account of the principal lines of work in which the organization had interested itself during the year.

The Transportation Department had been instrumental in securing the adoption of new demurrage rules, which had removed many of the old sources of friction between the railways and the shipping public. It had secured a general extension of the mixed carload privilege, and arranged for a reduction in the minimum weights of certain classes of commodities when shipped in car lots.

It had also succeeded in having the "owner's risk" clause eliminated from the classification in over two hundred instances, and had established the principle that in no event did the presence of this clause in the shipping contract relieve the carrier from responsibility for damage which was the result of its own negligence.

Canada and Japan.

The Commercial Intelligence Department's efforts with reference to the inclusion of Canada in Japan's most favored nation treaty had at length been crowned with success. Parcel post rates between Canada and the British West Indies had been reduced. The Association's delegates to the sixth Congress of Chambers of Commerce had succeeded in carrying their resolutions amid great enthusiasm.

Legislation in both the Dominion and Provincial arenas had been carefully watched. Instances were given of obnoxious measures at Toronto and Quebec which had been blocked or amended in such a way as to remove their sting. The gold and silver stamping bill, introduced at Ottawa on behalf of the Association, was calculated to remove many of the dishonest practices resorted to in the jewellery trade.

Technical Education.

Mr. Murray reviewed in considerable detail the efforts of the Association to secure Federal aid for the cause of technical education, and made a stirring appeal to the Nova Scotia Branch to follow the matter up energetically, and to assist the anticipated Education Commission to the fullest possible extent in arriving at a proper understanding of the needs of the Province along the line of industrial training.

The general Association, said Mr. Murray, were now behind the branch, heart and soul, in the agitation favoring Canadian ports for Canadian trade. They wanted to see the preference restricted to goods entering Canada direct from the country of origin. In 1904 over $16,000,000 worth of merchandise, accorded preferential treatment, had come in through United States territory. All of this would be immediately available for building up Canadian ports if such a principle were adopted, and Mr. Murray hoped the local Branch would conduct a campaign of education throughout the whole of the Dominion with a view to having the Government definitely commit itself to this policy.

Fire Insurance Matters.

E. P. Heaton, manager of the Association's Insurance Department, then addressed the meeting on insurance matters.

A great deal of attention has been given by the Association to the protection of its members against loss by fire. Experience has proved that many of them were living in a fool's paradise, thinking they were covered, when their policies were hardly worth the paper they were written on. This situation has arisen through the fact that too frequently men will place themselves in the hands of an ignorant agent with instructions to see that they are protected. This is a case of the blind leading the blind. Insurance has come more and more to be a profession, instead of a mere commission business, and the successful man has to study it and understand it thoroughly.

Mutual Insurance Best.

Mr. Heaton quoted numerous figures to illustrate the success which had attended the operation of general and class mutuals, both in the United States and in Canada, and demonstrated beyond the possibility of a doubt that mutual insurance, properly conducted, was the best, safest and cheapest. The investigations of the Association along these lines had led them to assist in the formation of three new Canadian mutuals, which would have the endorsation of the Association, but operate entirely independent of it.

The following resolutions were then adopted:

Develop Steel Shipbuilding.

Whereas, the Canadian Manufacturers' Association, endorsing the resolution passed by the Halifax Board of Trade on November 21st, 1905, considers it not only desirable but essential that Canada should have well-equipped shipbuilding yards, so that she should not be dependent upon foreign, or even British, builders for the maintenance of her mercantile marine;

That proof of the decadence of this industry is furnished by the fact that, while the water-borne commerce of the country during the last thirty years has increased from $217,000,000 to $473,000,000, the aggregate tonnage of vessels registered in Canada during the same period has decreased from 1,158,363 to 672,838 tons;

That the new vessels built in Canada during the year 1874 aggregated 190,756 tons, while last year the new tonnage only averaged 18,554 tons, or less than one-tenth of the tonnage built thirty years ago;

That the foregoing statements prove that Canada is steadily losing control of her own carrying trade, and that her builders are unable to compete with the highly developed yards of other countries;

That nearly all other countries have found it necessary to grant financial aid to their own builders in order to secure a share of their own carrying trade, and that such trade has in most instances enabled them to build up well-equipped shipbuilding plants that are now able to compete with foreign builders;

That an effort should now be made to resuscitate this industry, which would provide skilled labor for our artisans,

keep in the country the enormous sums paid out in freights, and enable Canada to take her place as an important maritime power;

Therefore be it resolved, That this Branch of the Association, in Annual Meeting assembled, again urge the Dominion Government to take up this important question during the approaching session of Parliament, and grant such adequate bounty on tonnage launched in Canada during a term of years as would place our builders on an equality with their chief competitors elsewhere.

Canadian Ports for Canadian Trade.

Whereas, the Nova Scotia Branch of the Association, reaffirming the resolution passed on January 25th, 1906, considers it of vital importance that goods entering Canada under the British preference should only be so admitted when imported directly to Canada through a Canadian port.

Resolved, that the General Association be again requested, by resolution at its annual General Meeting, to bring this matter before the Government in the shortest possible manner; and that this branch of the Association also wishes to place on record its opinion that all goods entering Canada directly from any country of origin should be accorded some preferential treatment.

New Officers.

The following officers were elected for 1906: President, William Levis; Vice-President, George Henderson. Executive Committee—Henry Flowers, Jr., Frank C. Simson, N. B. Smith, F. J. Ward, J. J. Fraser, H. E. Hill, I. C. Stewart, James Anderson, A. F. Pelton, J. P. Edwards, H. L. Hewson, James Eastwood, M. A. Shand, H. H. Hamilton. Nova Scotia Vice-President of the Association, T. M. Cutler.

TORONTO BRANCH.

The first meeting of the newly-appointed Executive Committee of the Toronto Branch was held on August 9th, and was well attended. The committee decided to divide the work amongst a number of sub-committees and the following committees were named: Dinner, Reception and Membership, Technical Education, Smoke By-law, Legislation, Civic League.

Different matters were dealt with as follows:

A letter from the Toronto Technical School regarding prizes in the different courses was referred to the Technical Education Committee.

Improvements in the Toronto postal service were suggested, and a letter was presented from the Post Office Department expressing their willingness to improve the service where specific instances were given them. The Legislation Committee was asked to prepare a statement for presentation to the Post Office Department.

Mr. J. R. Roaf called attention to the action of the Toronto Electric Light Co. in collecting for shortages in the reading of power meters on the basis of the charge for three months previous. In doing this Mr. Roaf contended that the Electric Co. were exceeding their rights. The Legislation Committee was asked to make investigations and to advise the members.

A communication from Mr. J. P. Murray having reference to the tariff on soft coal was referred to a special committee, who were asked to get all the information possible and report at a later meeting.

The Secretary reported having attended the Smoke Convention in the City of Detroit. A copy of this report will be published in INDUSTRIAL CANADA.

The committee are investigating the system of passing entries at the Toronto Custom House, and in this connection have secured information regarding Custom House practice in a number of Canadian and United States cities. This is to be investigated further and taken up with the Toronto Custom House at an early date.

NEW MEMBERS.

Passed by the Executive Council, August, 1906.

Braeside, Ont.

GILLIES BROS., LTD.—Lumber.

Chesley, Ont.

JAS. GRANT.—Woolens.

London, Ont.

HOBBS MFG. CO., LTD.—(W. O. Matthews, 2nd Member.)
HUNT BROS.—(Chas. B. Hunt, 2nd Member.)
HUNT BROS.—(Gordon C. Hunt, 3rd Member.)
LONDON & PETROLIA BARREL CO.—(Philip Pocock, 2nd Member.)
H. T. REASON & CO.—(C. H. Reason, 2nd Member.)

Montreal, Que.

CANADA PAINT CO., LTD.—(H. W. Aird, 3rd Member.)
CHARLES GURD & CO.—(Walter R. Gurd, 2nd Member.)
THE TOURVILLE LUMBER MILLS CO.—Lumber, Lath, Shingles, Pulpwood.
WOOL & COTTON DRYSALTERS CO., LTD.—Toilet Soaps, Cotton and Wool Goods Finishers.

Orillia, Ont.

THE WORLD FURNISHING CO., LTD.—Furniture.
THE TUDHOPE CARRIAGE CO., LTD.—(W. H. Tudhope, 2nd Member.)
STANDARD HARNESS CO.—Harness.

Peterborough, Ont.

THOS. BARRIE & CO.—Furs and Fur Garments.

Sackville, N. B.

HENRY C. READ.—Stone Quarries.

Toronto, Ont.

A. BERG & SONS.—Brick Machinery.
THE DOMINION HENDERSON BEARINGS, LTD.—Bearings and Special Machinery.
GOWANS, KENT & CO., LTD.—Cut Glass.
GOWANS, KENT & CO., LTD.—(K. F. A. Graburn, 2nd Member.)
JOHN B. SMITH & SONS, LTD.—(Robert Smith, 2nd Member.)

Waterloo, Ont.

BECHTELS.—Brick Machinery and Brick.

Winnipeg, Man.

THE CANADA PAINT CO., LTD.—(Edward Barry, 4th Member.)
T. W. TAYLOR CO., LTD.—Blank Books, Publishers.
THE WESTERN CANADA FLOUR MILLS CO.—(W. L. Parrish, 4th Member.)

The Improved Match Co., Ltd., of Montreal, was passed in June.

INVITATIONS FROM THE WEST

Many invitations and courtesies have been extended by the towns and organizations of Western Canada to the members of the Canadian Manufacturers' Association, who will visit the West in September. Wherever it was possible to accept the invitations they were accepted, but in many cases the shortness of the time at the disposal of the excursionists makes it impossible to include towns in the itinerary which otherwise they would be most pleased to visit. The Association is deeply grateful to these municipalities, and only regrets its inability to arrange for many more stops than have been provided for.

In Winnipeg and Vancouver the branches are arranging for the entertainment of the guests. The days spent in Winnipeg will be fully occupied. In Vancouver, besides the programme arranged for by the Branch, the members have been invited to attend the sessions of the Canadian Forestry Association, which will meet during the time of the visit.

Telegraph and Telephone Messages Free.

The following letters have been received from the Telegraph and Telephone Companies in Winnipeg in reference to the sending of messages over their lines during the time of the Convention.

From the Superintendent of the Canadian Northern Telegraph Co.—"On behalf of the Canadian Northern Telegraph Co., I take much pleasure in extending to the members of your Association in Convention at Winnipeg free use of our wires for family and social messages."

From the Superintendent of the Bell Telephone Co.—"I take pleasure in asking you to announce to the delegates, that the Bell Telephone Co., will grant to all registered delegates the free use of its local telephone system from Winnipeg hotels in any part of the city during the period of the Convention."

Invitations from Municipalities.

A few extracts are given from letters of various towns in the West inviting the Association to visit their towns during their western excursion.

From the Secretary, Kenora Board of Trade.—"I can assure you that it will afford us great pleasure to have you with us, and we will do our utmost to make your stay a pleasant one. . . . Apart from the great beauty of the Lake of the Woods, which we hope to show you, we have other attractions which we think will interest your members. . . . We think that a visit here will well repay your members, and trust that you will put this before your Association at an early date, and afford our Board the pleasure of taking care of your party should you decide to accept our invitation."

From the Secretary of the Port Arthur Board of Trade.—"Having learned that the Canadian Manufacturers' Association is contemplating a visit to Western Canada within a few months, the Board of Trade and the Council of Port Arthur have instructed me to extend to the Association in their name a cordial invitation to visit Port Arthur."

From the Secretary of the Fort William Board of Trade.—"The Fort William Board of Trade will be pleased to have the members of your Association remain over for a day on their way West. We had the pleasure of entertaining the members of your Association on their last trip to the Coast, and would extend to them a most hearty invitation on this trip."

From the Secretary of the Regina Board of Trade.—"I am instructed by the Council of the Board of Trade to request that you convey to the members a cordial invitation to visit Regina during their tour. I can assure them that they will be heartily welcomed, and that the citizens will be glad to extend to them every hospitality."

From the Moose Jaw Board of Trade.—"At a meeting of the Council held on Monday, 21st inst., the following resolution was unanimously passed:—'Resolved, that we extend to the Canadian Manufacturers' Association a cordial invitation on behalf of the city of Moose Jaw to visit this city on the occasion of their proposed trip to Western Canada during the coming fall.' Will you kindly convey the above invitation to the members of your Association."

From the Brandon Board of Trade.—"The City of Brandon, and the Board of Trade extend to this Association a very cordial invitation to put in a few hours in Brandon."

From Medicine Hat.—"On behalf of the City of Medicine Hat, we invite the members of your Association to spend an hour or two in this city. We believe we have more in Medicine Hat that will interest manufacturers than can be shown in any city in the West."

The Secretary of the Tourist Association of Victoria writes:—"I understand that your Association is going to meet in Winnipeg this year, and our Association would like very much to have your members extend their trip to Victoria, and, on behalf of our people, I herewith extend to them a hearty invitation. I can assure you that we will be in a position to give even a greater welcome to you than we did on the last occasion, and we hope that you will not only endeavor to come, but to allow a longer time in Victoria than when you were here last."

The Board of Trade of Saskatoon also wrote urging the Association to accept its hospitality. Unfortunately it was impossible to make the necessary railway arrangements.

Prince Albert, too, was most cordial in its invitation to visit the Gateway to Hudson Bay.

E. S. Rutledge, Mayor of Fort William, telegraphs: Can you arrange Association's itinerary so as to be Fort William's guests one day and banquet at night?

The City Clerk, Calgary, wrote on behalf of the city council to ascertain the time of the Association's arrival in order that entertainment might be arranged for. The writer hospitably expressed the city's desire to do for the excursionists just what will be most pleasant for them.

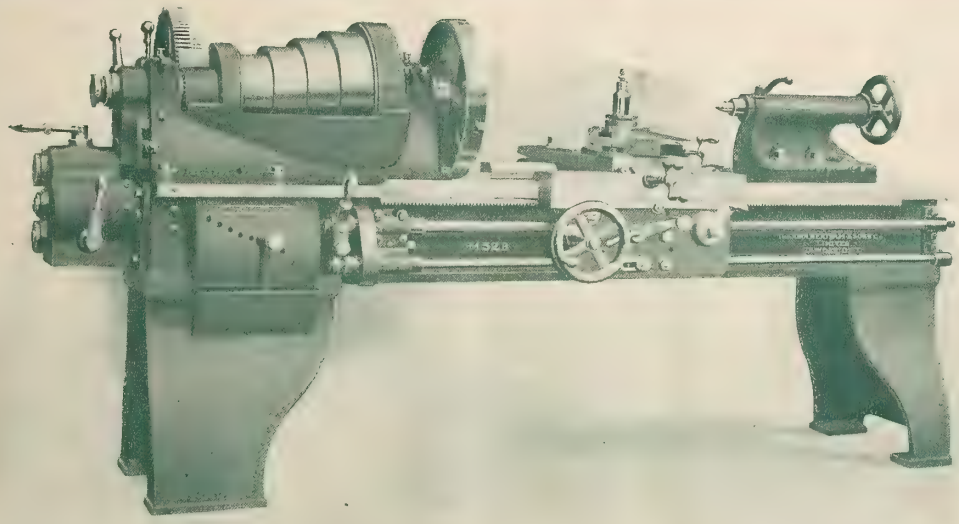
It is very pleasing to the manufacturers to have these expressions of good-will from the growing towns of Western Canada.

The *Manitoba Club* and the *Commercial Club,* both of Winnipeg, have generously extended the privileges of the clubs to all delegates during the time of the convention.

Vol. VII. No. 3 OCTOBER, 1906

INDUSTRIAL C.

27r Convention



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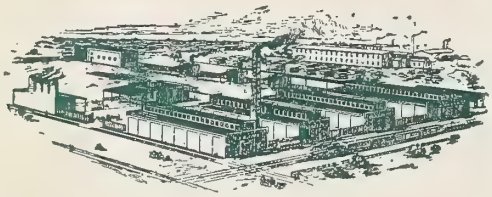
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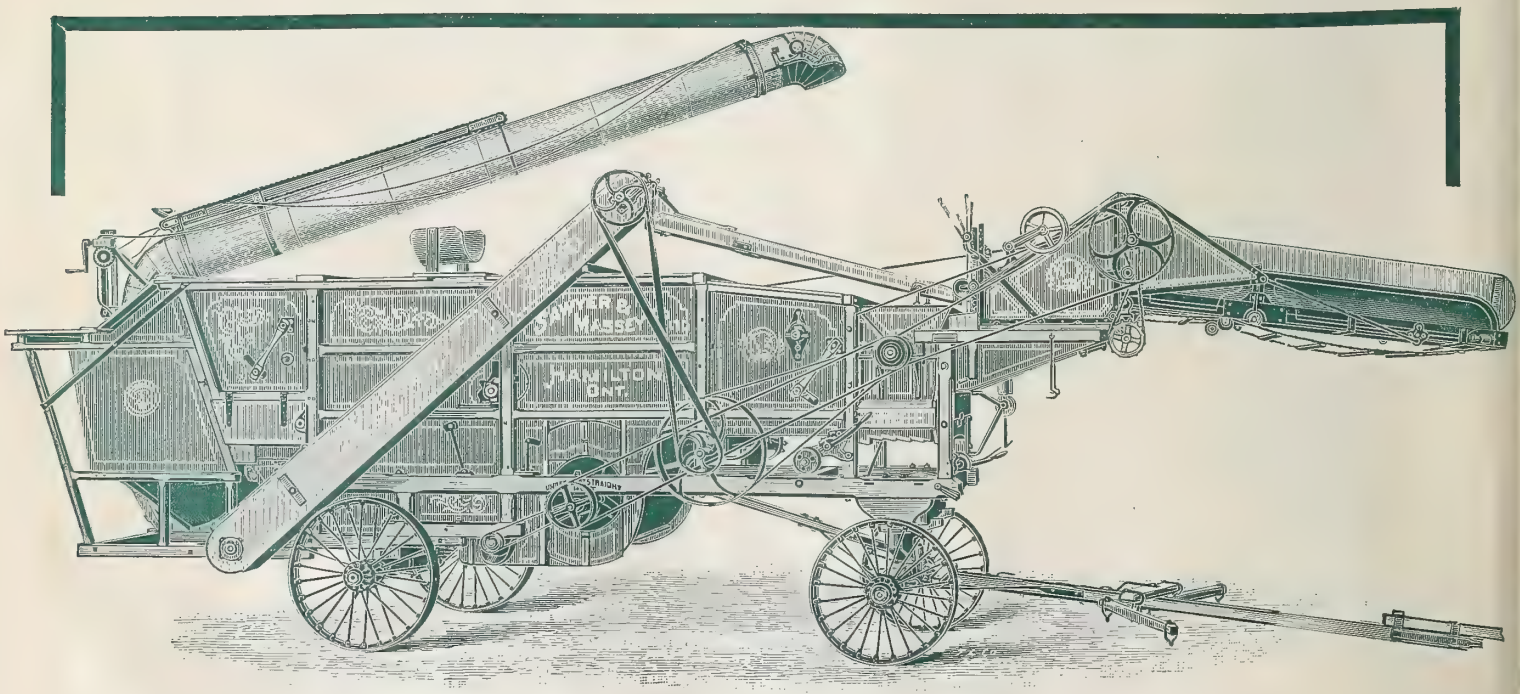
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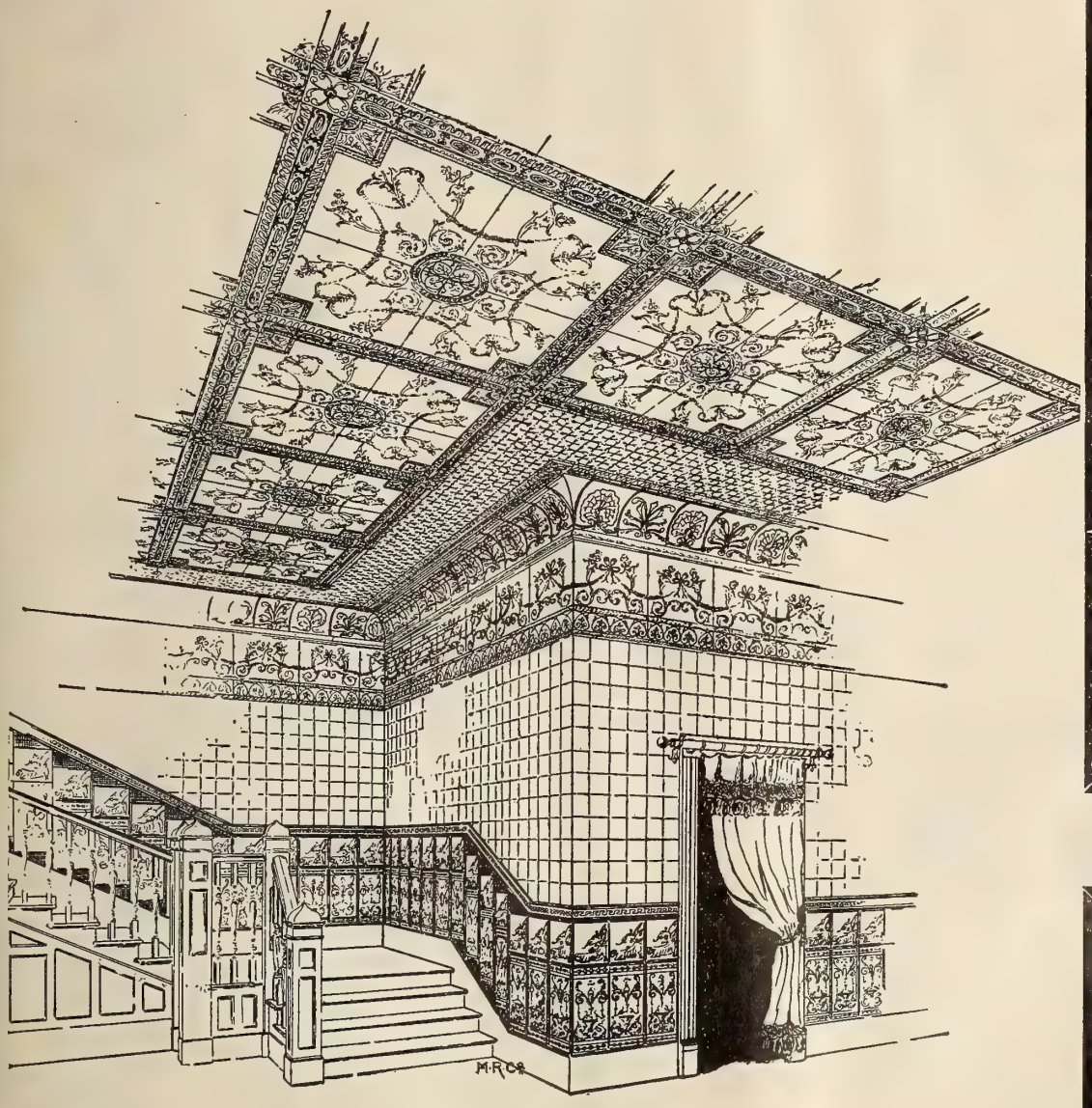


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We guarantee the material and workmanship, as well as prompt shipment and lowest prices.

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We make hundreds of different designs suitable for all classes of buildings. **Catalogue upon request.**

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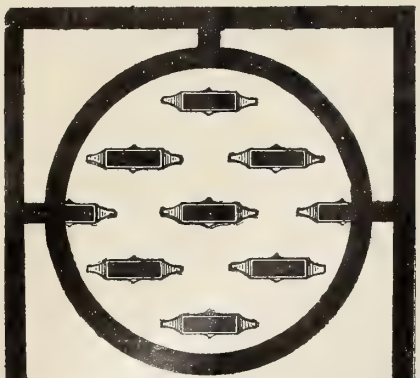
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TORONTO AND WINNIPEG

21 YEARS' EXPERIENCE



"HAYES"
PATENT STEEL LATHING

Is better than others because it requires less mortar, can be more quickly and easily applied and has greater rigidity.

It is fire, water and vermin proof—and reliably durable, costing least in the end. Many tests have proved its superiority. Write us about it.

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TORONTO, - - CANADA.

Paris, France, 1900



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either Galvanized or Painted

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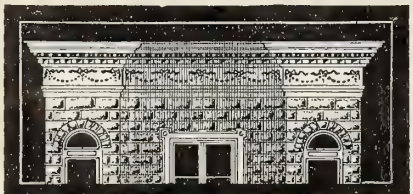
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If you're building, make sure of satisfaction by ordering EASTLAKES for the roof—fullest information if you write.

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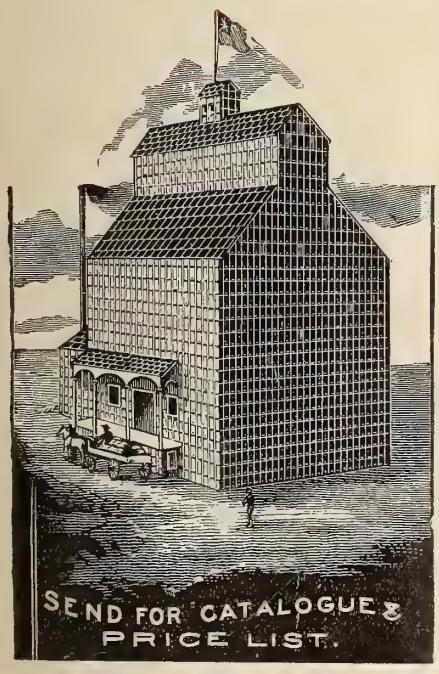
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About our antiquity, nor our size. We are NOT the most ancient Company upon the earth, neither have we a bigger stock than all creation.

BUT—We have 21 years experience—We make only reliable goods—We can fill a big order or a little one—AT ONCE—We can give you perfect satisfaction in quality and price.

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PNEUMATIC TIRES:
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Druggists' Tubing, Trus Bags, Stamp Rubber, Hockey Pucks, Automobile Tire Bandages, Moulded Goods.

WE KNOW THE BUSINESS

All rubber comes from the same source of supply, and no rubber working firm has an advantage over us in securing supplies of crude stock. All crude rubber is imported by its manufacturers. We import direct.

Our factory is equipt with every modern rubber working appliance. There is no feature of equipment lacking.

We are looking ahead and our campaign includes an extension to our present factory. It will afford twice the floor space we now utilize. We are looking ahead and building on the manifest growth of our business.

We own the block of land around the site of our factory so that we are not crampt for building space. The location is one of the most desirable in Toronto for factory purposes.



The Dunlop Tire & Rubber Goods Company, Limited

Head Office and Factory - Booth Avenue

TORONTO - CANADA

DEPOTS: MONTREAL WINNIPEG VANCOUVER ST. JOHN

GEO. GALE & SONS

Waterville, Que.

WAREROOMS:

323 Notre Dame St. West,
MONTREAL

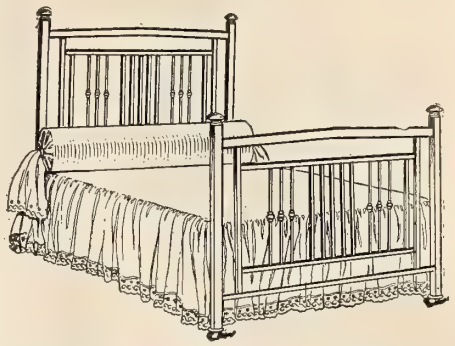
189 and 191 Queen St. East,
TORONTO

398 and 400 Portage Avenue,
WINNIPEG

MANUFACTURERS OF:

Iron & Brass Bedsteads, Dominion, New Dominion and Cuban Springs, and Mattresses and Pillows of all kinds

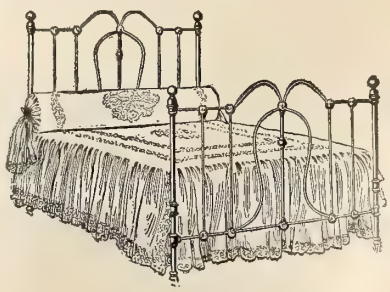
SATISFACTION GUARANTEED



No. 2008

For 25 years without intermission of a year or a trip, we have called on the Western trade with the very latest and best goods in our line of Bedsteads, Spring Beds and Mattresses.

We finish all of the brass work on our Brass and Iron Bedsteads with :: English Lacquer: the only finish that has stood the test of time. We guarantee all brass work 15 years. Our Spring Beds are not only the most endurable but the most elastic on the market. We use principally English Ticking on our Mattresses



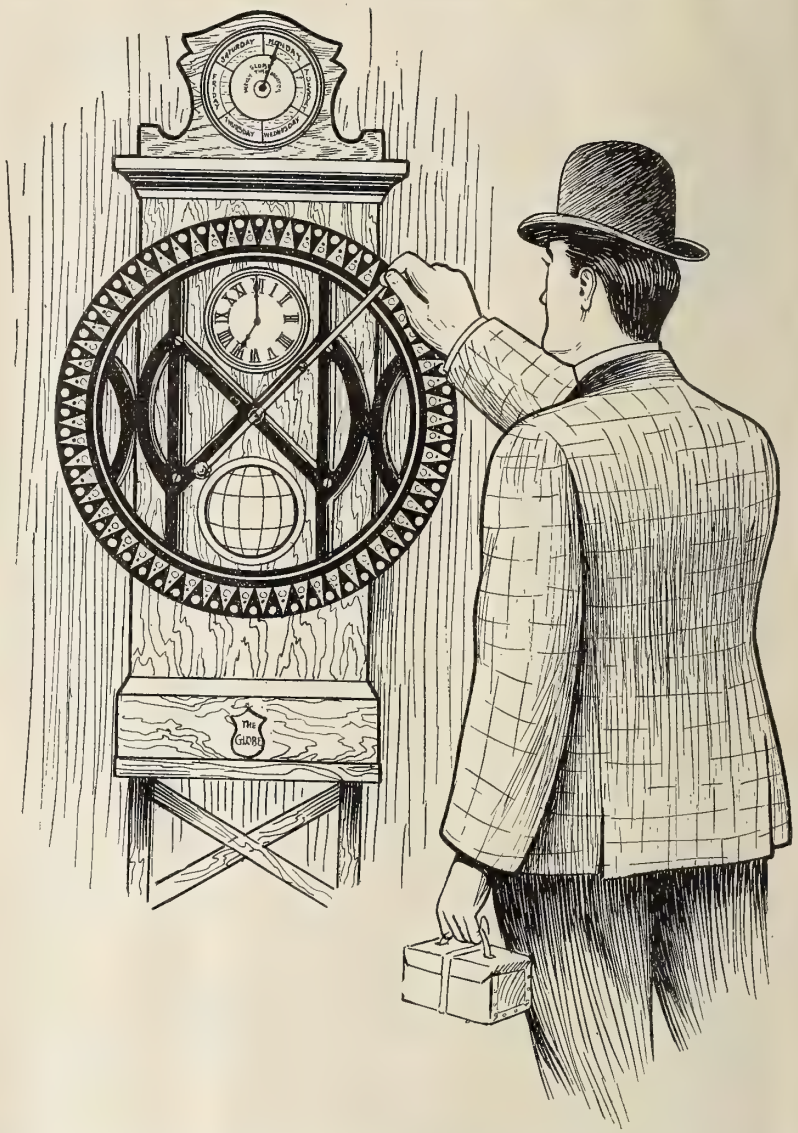
No. 310

THE 'GLOBE'

"Shews no Partiality"

We have no doubt you realize the importance of having your employees ON TIME —its half the battle in these busy times of ours.

Just figure out how much it would cost you if your hands were late a minute or two each day.



"MADE IN CANADA"

CANADIAN MANUFACTURERS

realize this, and the result is the installation of a Time Clock, we will convince you that we have the best Clock and Time System on the market. There are hundreds in use in Canada at present.

The users know the value of a good article. Try all the makes you like, include a "GLOBE" in the test, and we know we will both be satisfied at the decision.

UNIVERSAL SYSTEMS, LTD.

HEAD OFFICE:
8-10 Adelaide St. West, Toronto

OFFICES:
Toronto & Montreal, Canada

A Few Words from The "Canadian" Girl

"——Oh yes! "Canadian" Rubbers are 'way ahead in the magnitude of sales effected this Season. You know, when all things are considered, I don't think any unprejudiced person begrudges us the top position. We've planned, long and strenuously, to deserve it. The many strong features of our Footwear are truly "Canadian"—old style honesty, combined with up-to-dateness and aggressiveness. "Canadian" Rubbers are becoming widely known—in England, on the Continent, in Australia, "wherever the flag flies"—as the "National" brand of Rubber Footwear, typical of progressive ideas, "Everything new that's good."



The "Canadian" Girl.

"CANADIAN" RUBBERS

THE NATIONAL BRAND OF RUBBER FOOTWEAR

"Mark of Quality"

MANUFACTURED EXCLUSIVELY BY

The Canadian Rubber Co. of Montreal Limited.

THE WIRE & CABLE CO.

MONTREAL.

MANUFACTURERS OF

Electrical Wires and Cables . .

FOR

TELEPHONE,

TELEGRAPH,

LIGHTING

AND

TROLLEY PURPOSES.

WE MANUFACTURE

WESTERN PINE LUMBER

LARGE STOCKS READY TO SHIP

OTIS STAPLES LUMBER CO.

WYCLIFFE, B.C.

1	"	- -	Selects
1½	"	- -	Selects
2	"	- -	Selects
1½	"	- -	Shop Common
2	"	- -	Shop Common
2	"	- -	Tank Stock

WRITE US FOR PRICES

We told you so?

" The COMMERCIAL "

Winnipeg — Vancouver

The West is progressing in gigantic strides ; such is the conclusion to be arrived at when one realizes the prodigious vitality of the daily, weekly or monthly press of these vast and fertile regions.

I have just received "The Commercial" of Winnipeg the Manufacturers' Edition — 10¼ x 14 inch size, 220 pages.

It is a grand edition and has made great progresses in the past few years : I have somewhat lost sight of it for two or three years and, to my great surprise, I noticed the remarkable transformation of that commercial press organ—whose influence cannot be but considerable throughout the West.

One hundred and sixty pages of ads ! that is no small advertising triumph for a commercial newspaper : it shows both the journal's vitality and the entreprising spirit of the trade that uses such a medium to reach a choice set of customers spread over a rich country, the real granary of abundance for European countries.

"The Commercial" is in its twenty-fourth year : it has grown up with the country of its birth ; as quickly as the West was growing in population, "The Commercial" extended systematically its sphere of action. And here we see it to-day having attained such a point where it can proudly claim the title of "Canada's Greatest Trade Newspaper."

What attitude will the Ontario trade papers take in face of a competition who springs up to bar the way and to oppose victoriously,—one might be led to believe it—their expansion in the West ?

This question is interesting to the highest degree for the advertisers.

" The Commercial " monopolizing the Western customers, the English trade newspapers of the provinces of Quebec and Ontario find their field of action more limited.

Already, in comparing the volume of ads in the past of some of our Eastern trade publications, that used to command the situation with the volume of ads they have to-day, in taking as a basis the "special numbers," it is easy to notice a most remarkable displacement of advertising which can be retraced in "The Commercial."

I do not intend at present making a comparative study of the English commercial press ; but, I do propose, between now and the end of the year, discussing it again and in the meantime completing my documents refering to same.

As for "The Commercial," I cannot but thank the editors for having been so kind as to send me that publication interesting from the reading matter point of view as well as from that of the advertising which is a fairly exact barometer of the state of prosperity of the country. As to the remarkable volume of advertising contained in this number, a good share of our congratulations goes to our confrère, Mr. David Burnside, so favorably known in advertisingdom almost throughout the whole Dominion and who is incontestably one of the best advertising agents in Canada.

The above is a photographic reproduction of an editorial in the September number of " Publicity " of Montreal. Further comment is unnecessary save to draw your attention to our own announcement on page 167 of this paper.

The HUGH C. MacLEAN CO., Ltd.

Publishers of " The Commercial "

WINNIPEG - AND - VANCOUVER

CANADIAN WORKS
OF THE
INTERNATIONAL HARVESTER CO.
OF CANADA, LIMITED,
HAMILTON, - - - ONTARIO

The Canadian works of the International Harvester Company of Canada, Limited, are located at Hamilton, Ontario. The plant occupies one end of a 200 acre tract, and is the largest on British soil devoted exclusively to the manufacture of harvesting machines, seeding machines and tillage implements.

Following are the names and dimensions of the various buildings which comprise the works :—

Grey iron foundry—80 x 740 ft., one story high, with annexes devoted to sand sheds, coke sheds and core room.
Malleable iron foundry—84 x 880 ft., one story high, with finishing department 84 x 80 ft., at one end, three stories high.
Forge shop—84 x 702 ft., one story high.
Erecting and assembling building—72 x 350 ft., two stories and basement.
Knife and bar building—78 x 121 ft., four stories and basement.
Wood shop—450 ft. long, a portion of which is 72 ft. wide and the remainder 100 ft. wide, all one story high.
Paint shop—72 x 178 ft., four stories and basement.
Transformer house—22 x 43 ft., one story high.
Malleable foundry core room—61 x 83 ft., one story high.
Grey iron core room—35 x 150 feet., one story high.
Pumping station and boiler house—41 x 119 ft., one story high.
Storage house—120 x 400 ft., four stories and basement.
Office building—25 x 40 ft., two stories and basement.



All of these buildings are of modern construction and embody the latest and best ideas for fire protection. A full line of both Deering and McCormick harvesting machines, seeding machines, and tillage implements are manufactured at this plant. The list of machines and implements includes the following: Grain binders, mowers, rakes, tedders, disc harrows, smoothing harrows, lever harrows, spring tooth harrows, hoe drills, shoe drills, disc drills, combined cultivators and seeders, and broadcast seeders.

A high standard of excellence is maintained in the manufacture of these machines and implements, and the demand for them throughout the Provinces of Canada and the British possessions is steadily increasing.

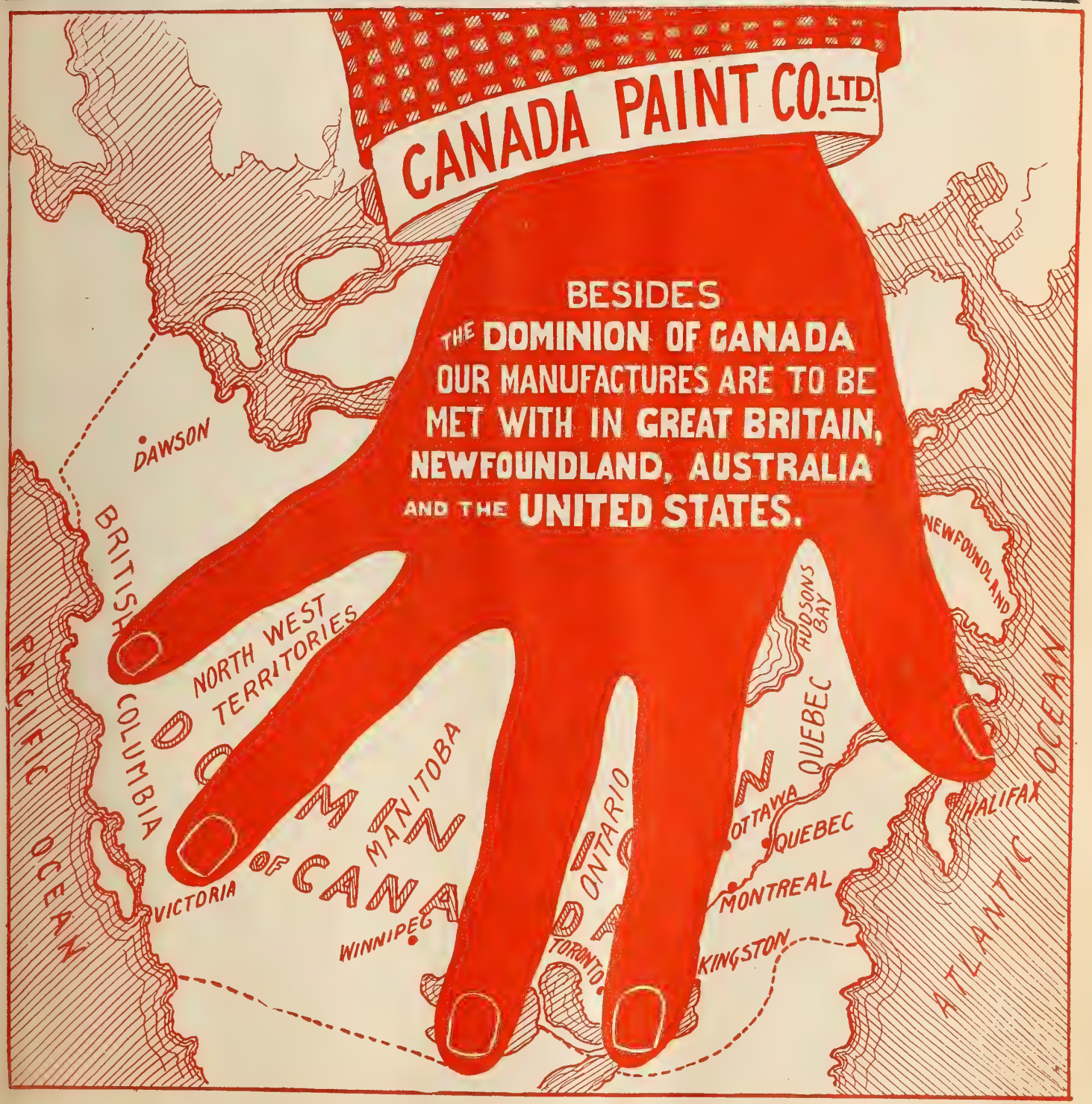
MANUFACTURING PLANT:

INTERNATIONAL HARVESTER COMPANY OF CANADA, Limited
HAMILTON, - ONTARIO

BRANCHES:

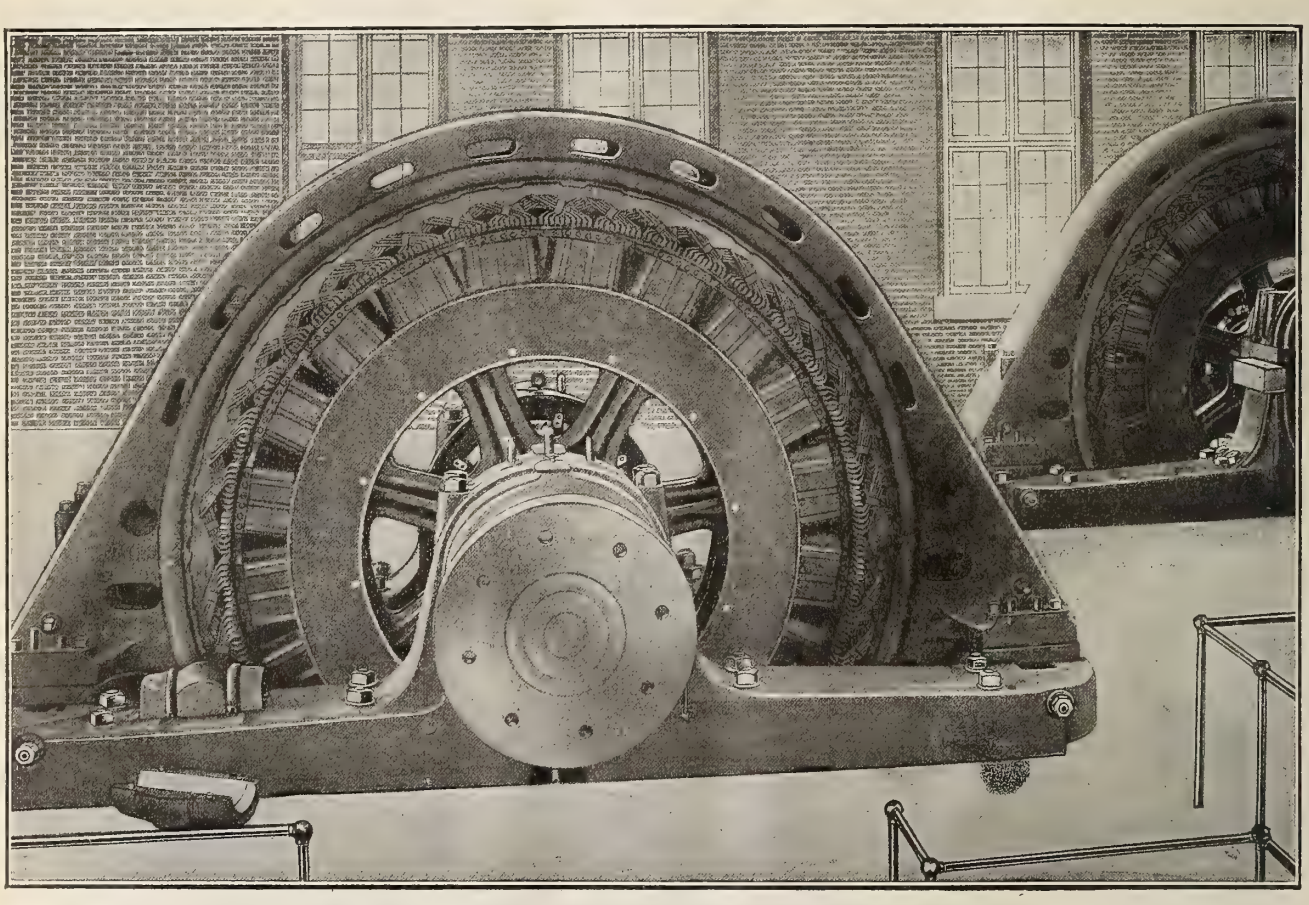
CALGARY, LONDON, MONTREAL, OTTAWA,
REGINA, ST. JOHN, TORONTO, WINNIPEG.

THE UNIVERSALITY AND POPULARITY OF THE MANUFACTURES OF THE CANADA PAINT COMPANY, LIMITED, OF MONTREAL, TORONTO AND WINNIPEG, IS CONCEDED BY THE TRADE AND MANUFACTURERS GENERALLY. SPECIAL PAINTS AND VARNISHES FOR SPECIAL PURPOSES.



WESTINGHOUSE

Revolving Field Alternators



3750 K.W. Two-Phase, 2200-Volt Revolving Field Alternators
In the Power Station of the Shawinigan Water Co., Shawinigan Falls, Ont. (During erection)

Noted For Their
Cool Operation
Exceptional Regulation
Large Overload Capacity

Canadian Westinghouse Co., Limited.

General Office and Works: HAMILTON, ONT.

For particulars address nearest office

Lawlor Bldg., King and Yonge Sts.
Toronto

Hamilton

Sovereign Bank of Canada Bldg.
Montreal

152 Hastings Street
Vancouver

922-923 Union Bank Bldg.
Winnipeg

134 Granville Street
Halifax

The general merchant controls the trade

of Middle and Western Canada. This is the reason "The Commercial"—the general merchants' paper—carries more advertising than any other trade weekly in Canada; and also the reason this paper's circulation is greater, in this field, than the combined circulation of all other Canadian trade papers.

According to Dun's there are, in Manitoba, Saskatchewan and Alberta, 37 dry goods stores, 76 men's furnishings, 54 clothing, 227 grocers and nearly 2,000 general stores.

Does it not stand to reason that "The Commercial" reaching, as it does, 90 per cent of the total worth selling to, is the paper for you to advertise in?

The Commercial is really the only journal with the circulation and influence worthy your consideration should you wish to reach reliable buyers in these the best buying and most rapidly growing provinces. Intelligent investigation will prove this claim.

We are drawing business for others—we can draw business for you.



THE
Hugh C. MacLean Co. Ltd.
Publishers of Trade Newspapers
WINNIPEG & VANCOUVER
Branches: Toronto and Montreal

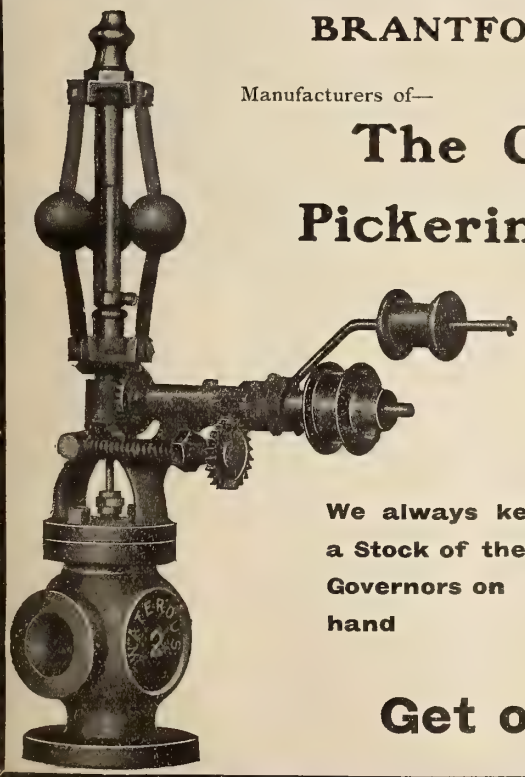
Also Publishers of
"LUMBERMAN & CONTRACTOR"
VANCOUVER

THE WATEROUS ENGINE WORKS CO., LIMITED

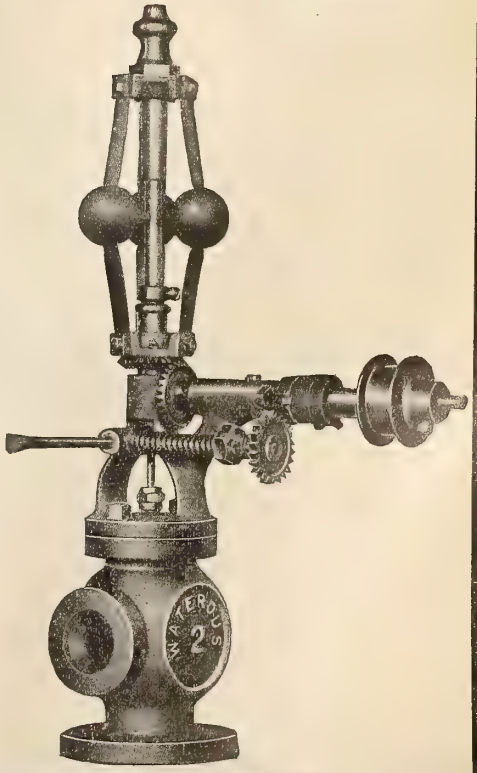
BRANTFORD - CANADA

Manufacturers of—

The Celebrated Pickering Governor



WILL REGULATE THE SPEED OF ANY ENGINE



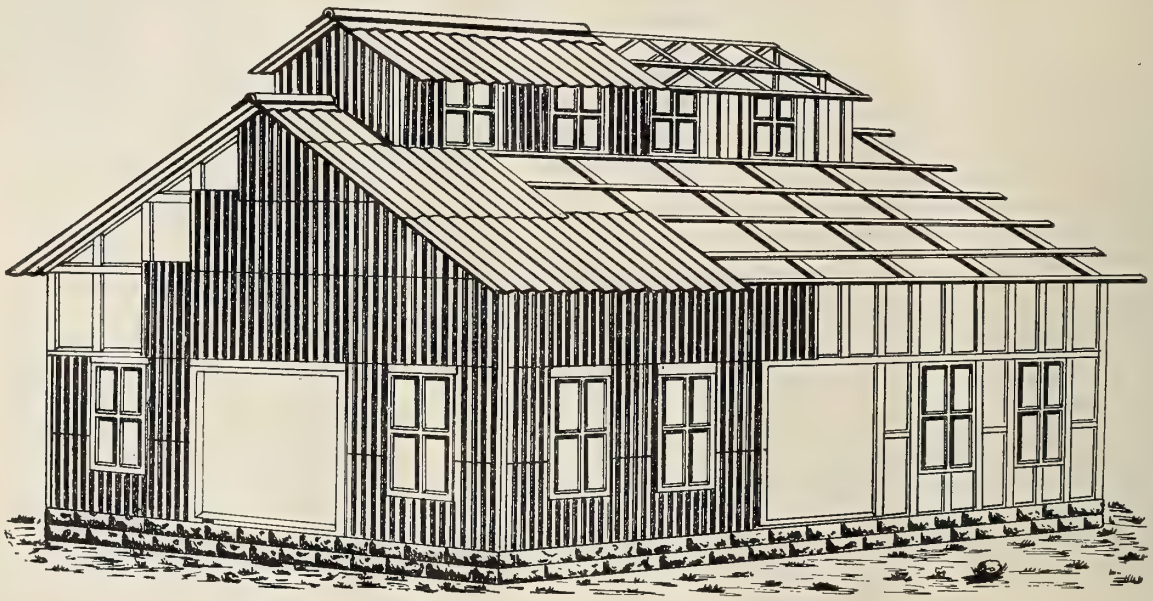
We always keep a Stock of these Governors on hand

BUILT IN ALL SIZES

Get our Prices

CORRUGATED IRON

"Keeping Everlastingly at it Brings Success"



PEDLAR'S CORRUGATED IRON is made on a **38,000 lb. Press** (the only one in Canada), one corrugation at a time, and is guaranteed true and straight to size.

We carry a **600 TON STOCK** in **OSHAWA, MONTREAL, TORONTO, OTTAWA and LONDON,** and can ship ordinary requirements same day as order is received.

Made in 1 in., 2 in., or 2¾ in. Corrugation in sheets any length up to 10 feet, in 28—26—24—22—20—18 gauge, both painted or galvanized. This class of material is most suitable for fireproofing **BARNS, FACTORY, MILL,** and **WAREHOUSE BUILDINGS,** and is water and wind proof. Corrugated Ridges, Lead Washers, and Galvanized Nails carried in Stock.

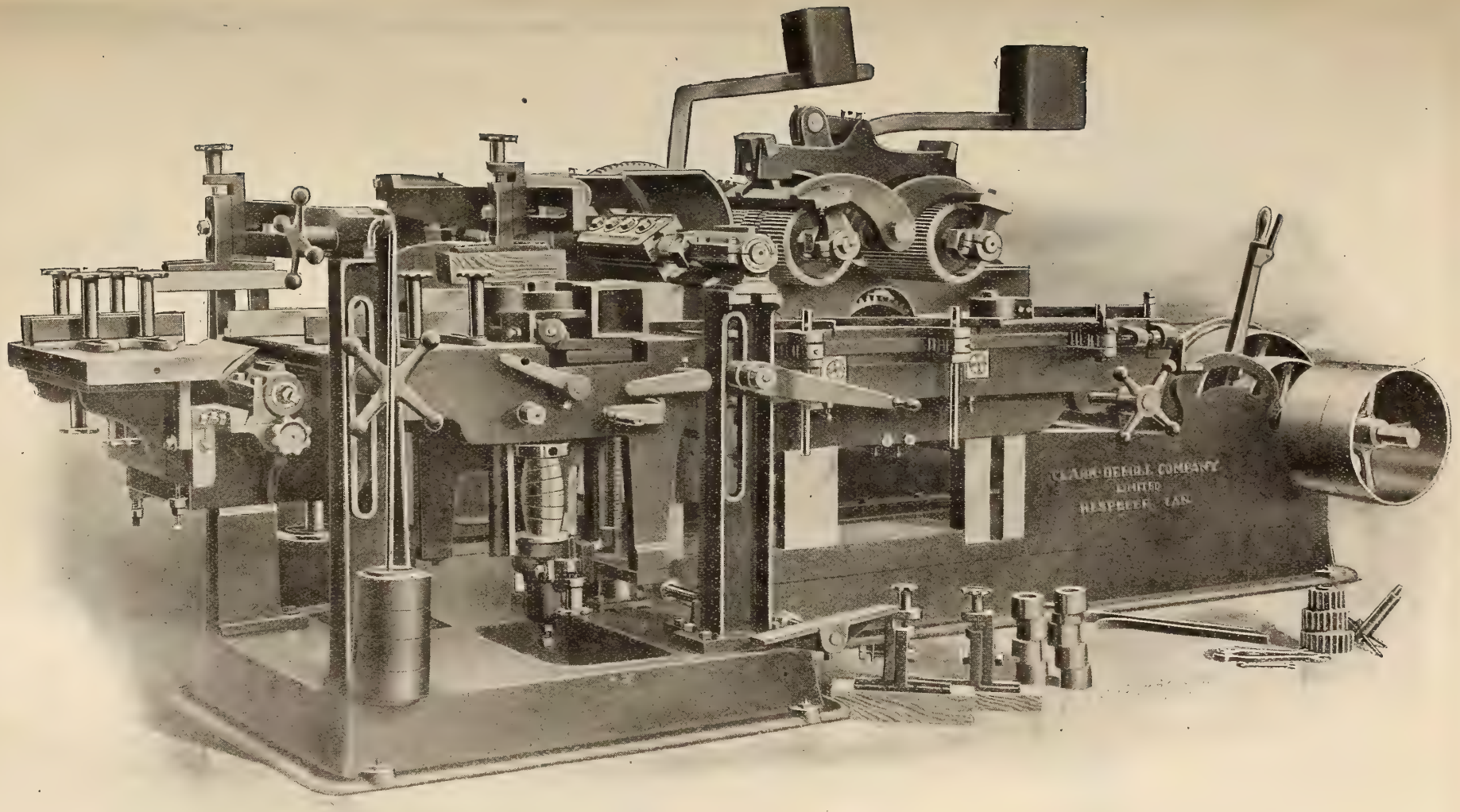
Send Specification to your nearest office for Catalogues and Prices.

THE PEDLAR PEOPLE

Montreal, Que.	Ottawa, Ont.	Toronto, Ont.	London, Ont.	Winnipeg, Man.	Vancouver, B.C.
767 Craig St.	423 Sussex St.	11 Colborne St.	69 Dundas St.	76 Lombard St.	615 Pender St.

Write your nearest Office—**HEAD OFFICE AND WORKS, OSHAWA, ONT.**

Largest Makers of Sheet Metal Building Material under the British Flag



Extra Heavy Moulder, on Base Planes 10 Inches, 12 Inches and 13 Inches wide, by 12 Inches Thick. Has Eight Changes of Feed, 11, 15 19, 22, 25, 34, 42 and 50 Running Feet per Minute. **Unequalled for Completeness & Efficiency**

CLARK-DEMILL COMPANY, LIMITED

SUCCESSORS TO CLARK & DEMILL, GALT, CANADA.

Manufacturers High Grade Wood-Working Machinery

HESPELER, ONTARIO, CANADA

Western Representatives for Manitoba, Saskatchewan and Alberta, THE WATEROUS ENGINE WORKS CO., Limited, of Winnipeg, Manitoba.

"EXCELLED BY NONE" Made in Canada by Canadians for Canadians

THE STRACHAN HAT

PRICE

$3 00

Write us for Agency



No. 5843

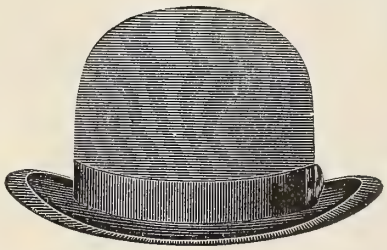
Olymphia

The Hats of Latest Vogue



No. 5844

Bedford

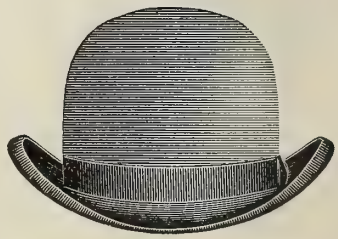


No. 5751

Dimensions:

$5\frac{1}{4}$ x $1\frac{7}{8}$—2
$5\frac{1}{2}$ x $1\frac{7}{8}$—2—$2\frac{1}{8}$
$5\frac{3}{4}$ x 2—$2\frac{1}{8}$—$2\frac{1}{4}$

STRACHAN.



No. 5752

Colors: Light, Medium and Dark Brown, and Pearl and Black.

Dimensions:

$5\frac{1}{4}$ x $1\frac{7}{8}$—2
$5\frac{1}{2}$ x $1\frac{7}{8}$—2—$2\frac{1}{8}$
$5\frac{3}{4}$ x 2—$2\frac{1}{8}$—$2\frac{1}{4}$

Strachan Bros

In towns where we have no agency the hats shown herewith are delivered express paid, at all points covered by Express Companies, on receipt of $3.25 (the extra 25 cts. is for Express delivery). Send your order to our factory in Toronto, with your age, height and waist measure, giving the size of hat worn, and naming the hat number and color wanted.

STRACHAN BROS.

HAT MAKERS

130 WELLINGTON ST. W. - TORONTO, ONT.

TWO STRONG REASONS

Why you should stock "Five Roses" Flour are these:

1. "Five Roses" is known throughout Canada, and indeed the whole world, as the highest quality and most uniform Flour made. The fact that you handle it will give your Customers confidence in your whole stock.

2. Because it will make more and better bread and pastry per pound than ordinary brands, is easier to bake with, and is steadily advertised "Five Roses" Flour sells faster and easier. That means more business and more profit for you.

IF YOU DO NOT ALREADY HANDLE IT SEND US A TRIAL ORDER TO-DAY AND PROVE THE TRUTH OF THE ABOVE STATEMENTS.

Lake of the Woods Milling Co.

LIMITED.

MONTREAL, WINNIPEG, KEEWATIN, TORONTO, PORTAGE LA PRAIRIE, QUEBEC, ST. JOHN, N.B., OTTAWA, LONDON, ONT.

The American Appraisal Co.

MILWAUKEE - WISCONSIN

C. M. CLARKE A. E. CORTIS A. M. CORTIS

Clarke & Cortis,

100 WILLIAM STREET, NEW YORK
TELEPHONE 5997 JOHN

Insurance.
Cable Address, "Clarcort"
New York,

114 WATER STREET, BOSTON
TELEPHONE 3494 MAIN

May 17th, 1906

The American Appraisal Company,
Milwaukee, Wis.

Gentlemen:-

We take pleasure in stating that we have made a thorough investigation of your system of appraising manufacturing plants, and have no hesitancy in stating that your work is the most complete and comprehensive of its kind that we have seen.

The importance of having a complete appraisal, showing the true insurance value of a property made before a fire, must appeal to every owner of a manufacturing plant. Your appraisal furnishes the necessary information for a quick and accurate adjustment, and to our mind practically eliminates the differences which may arise under the co-insurance clauses.

We have found them of great value and assistance in properly determining and distributing fire insurance. A number of our clients have had their plants appraised by your Company, and several others have your proposition under consideration.

Yours truly,
CLARKE & CORTIS.

CANADIAN BRANCH: - 34 YONGE ST., TORONTO

The American Appraisal Co.

MILWAUKEE - WISCONSIN

GEORGE GILLIES, President. *T. H. WATSON, Sec'y-Treas.*

TORONTO BOLT AND FORGING CO., LIMITED

CONSOLIDATING
THE GEORGE GILLIES CO. OF GANANOQUE,
AND SWANSEA FORGING CO. OF SWANSEA

MANUFACTURERS OF
BOLTS, NUTS, SPIKES, RIVETS, CARRIAGE HARDWARE
AND DROP FORGINGS.

ADDRESS ALL COMMUNICATIONS TO THE COMPANY

Toronto June 22nd, 06.
Canada

W.B.

The American Appraisal Co.,
Milwaukee, Wis.

Gentlemen:-

We are pleased to inform you that the inventory and appraisal of our plant and machinery, which you made for us some time ago, proved itself to be of very valuable assistance in the adjustment of our recent loss by fire, and we were able to procure a very satisfactory settlement on the basis of your appraisal.

As soon as we rebuild our works will be glad to take up the question of having a new inventory prepared by your Company.

In the meantime, we are,

Yours truly,
TORONTO BOLT AND FORGING CO., Limited.
T. H. Watson, Sec'y-Treas.

CANADIAN BRANCH: - 34 YONGE ST., TORONTO

The American Appraisal Co.

MILWAUKEE - WISCONSIN

WHAT IS CO-INSURANCE

¶ Co-Insurance, practically speaking, is your liability for the difference between the amount of insurance you are actually carrying (based on your ledger or inventory values) and the amount you should carry, based on the true authentic value of your property as shown by our appraisal.

EXAMPLE OF OPERATION OF 80% CO-INSURANCE CLAUSE

Your ledger values of structures, machinery, tools, fixtures, and all other equipment (cost value less depreciation)	$75,000.00
80% insurance on above actually carried	60,000.00
Actual insurable value, as per our appraisal, based on present cash value, less depreciation	100,000.00
80% insurance on above should have been	80,000.00
Suppose there is a loss under this policy as actually carried of	20,000.00
The insurance companies stand 6/8 of the loss or	16,000.00
The assured loses 2/8 for non-compliance with the co-insurance clause	5,000.00

¶ You can avoid any losses under the co-insurance clause by having our appraisal before the fire.

¶ We do not interfere in the operation of the plant, nor do we take our values from your books.

¶ Our appraisal before a fire is always more authentic and complete than any appraisal made from ruins and ashes, or than your own inventory made before a fire.

CANADIAN BRANCH: - 34 YONGE ST., TORONTO

The American Appraisal Co.

MILWAUKEE - WISCONSIN

The Brantford Carriage Co., Limited

Manufacturers of

Carts, Wagons, Buggies, Carriages and Sleighs

Brantford, Ont., May 7th, *1906*
Canada

The American Appraisal Co.,
Milwaukee, Wis.

Gentlemen:-

In reply to yours of the 5th enquiring with regard to fire we recently had in our plant, beg to say, you have been correctly informed. In adjusting the matter of loss with the insurance companies we used the figures provided by you in the appraisal you made of our plant, and they were accepted without question. It was decidedly of great assistance to us in getting the loss satisfactorily adjusted, and we have much pleasure in stating that we believe no factory or firm can afford to be without such a record of their plant and machinery. We will take pleasure in answering any communications that you might refer to us.

Yours truly,

THE BRANTFORD CARRIAGE CO.,
Limited.

Dic. T.H.W.

T. H. WHITEHEAD,
President.

CANADIAN BRANCH: - 34 YONGE ST., TORONTO

Seeing is Believing

And the Canadian Manufacturers who visited Regina on September 20, have had an opportunity of sizing up the remarkable development which is going on in the capital of Saskatchewan. Excellent openings are offered for many lines of manufacture, and an enterprise located at Regina has immense advantages over distant competitors. Three new railway systems have surveyed their lines into the city from the east and south, and manufacturers will soon enjoy competition in freight rates.

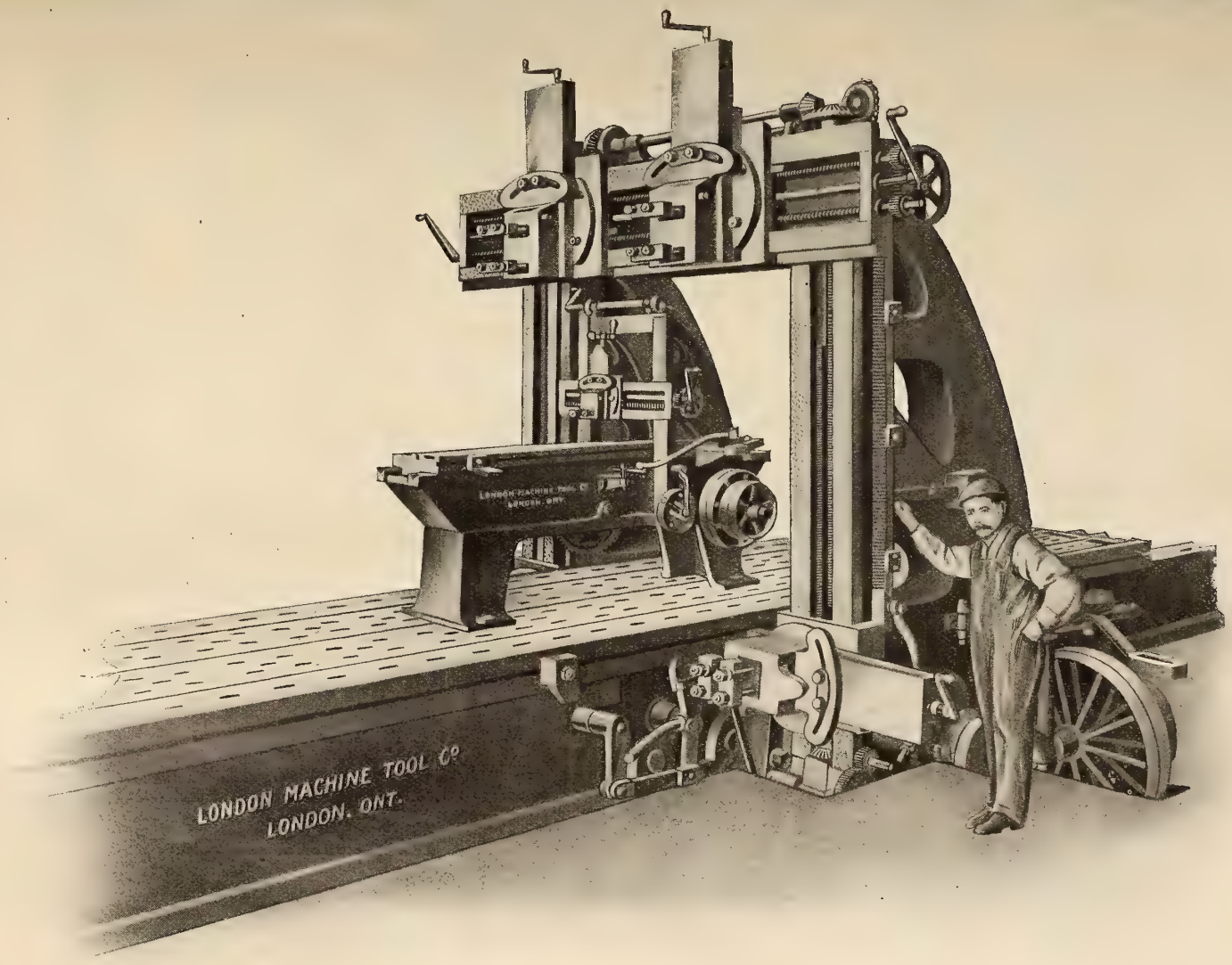
Regina is the wealthiest municipal corporation in Canada. She is in the heart of a rich and fertile area, and the permanence of her position as a commercial centre is assured.

There are particularly good openings for cereal mills, soap factories, carriage works, furniture factories, flax mills, oil mills and many other industries which depend upon an agricultural district for raw material.

FOR FULL INFORMATION, ADDRESS—

The Regina Board of Trade,

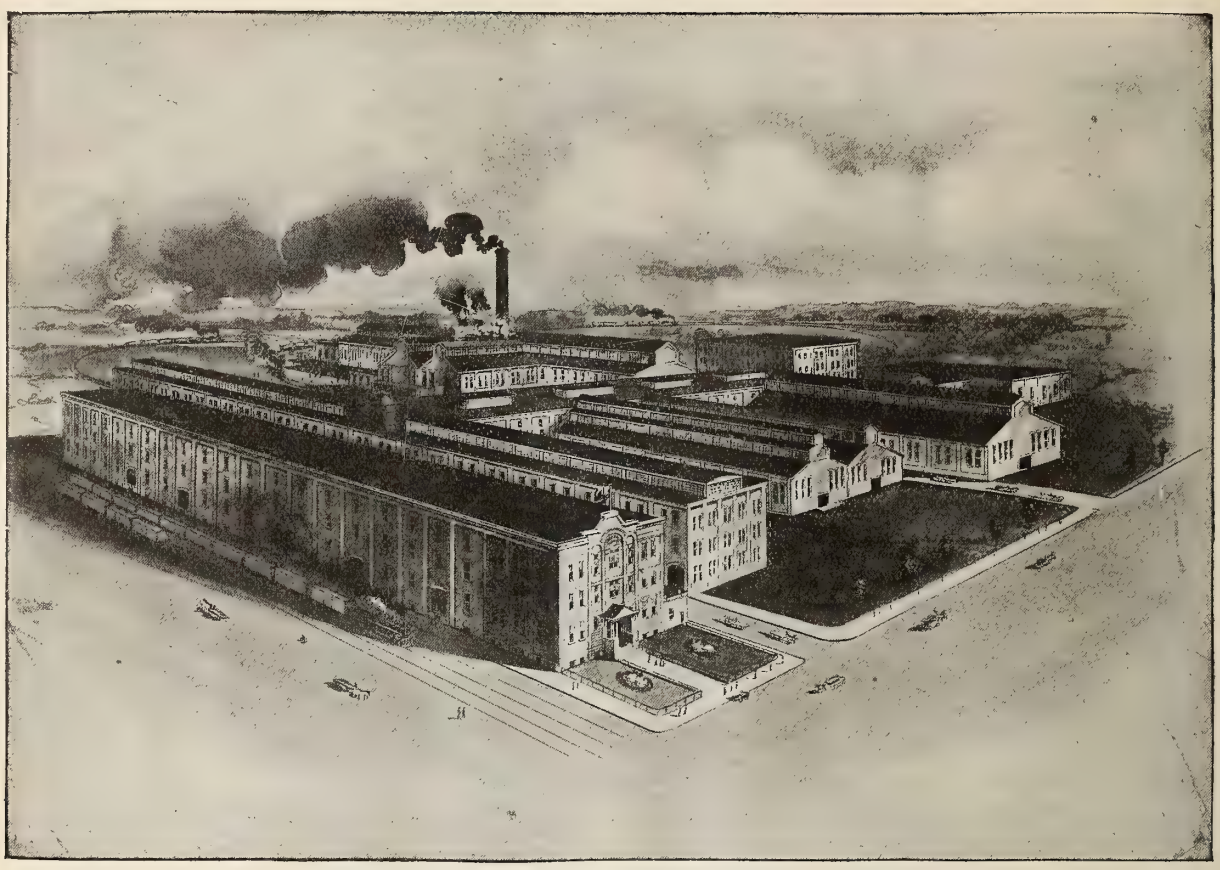
A. E. BOYLE,
COMMISSIONER AND SECRETARY
P. O. Box 494 Regina.



72" x 72" PLANER

LONDON MACHINE TOOL CO., LIMITED

HAMILTON ONTARIO



NEW WORKS OF THE COCKSHUTT PLOW CO., LIMITED

The Fountain Head of Cockshutt Plows

Most Complete Plow Factory in America

Site Comprises 21½ Acres.

All Machinery Operated Entirely by Electrical Power & Natural Gas Fuel.

Every Department Equipped with Modern Machinery for turning out Perfect Work.

LARGE IMPROVEMENT DEPARTMENT, where skilled experts are continually thinking out possible improvements and putting new ideas to the test of practical use.

Mr. Buyer, what interest have you in all this?

These facilities mean turning out perfect implements, and perfect implements save labor, save money, and solve the problem of abundant crops. All these things tell on your bank balance at the end of the season.

Cockshutt Implements go all over the world, and in every country turn the earth upside down to its advantage.

AGENCIES THROUGHOUT THE WORLD.

WESTERN BRANCHES:
WINNIPEG REGINA CALGARY

COCKSHUTT PLOW COMPANY, Limited

BRANTFORD - - - CANADA



J. L. JONES
ENGRAVING CO.
ILLUSTRATORS
DESIGNERS
ENGRAVERS
¶ PHOTO-ENG.
HALF-TONE
ELECTROTYPES
168 Bay Street.
Toronto.

Service
Quality
Price

Is
J. L. Jones Engraving Company's
Symbol of Success

CALGARY

The Industrial, Educational & Commercial Capital of Alberta

The Finest Residential Centre in . . . Western Canada . . .

STEAM COAL AT $2.50 PER TON. ELECTRICAL POWER SUPPLIED TO NEW INDUSTRIES BY MUNICIPAL PLANT AT COST PRICE.

CALGARY WHOLESALERS reach a consuming population, increasing at an enormous rate, throughout the entire Province of Alberta as well as Eastern British Columbia. Over a hundred travellers make Calgary their Headquarters.

The following commodities are now manufactured at Calgary :

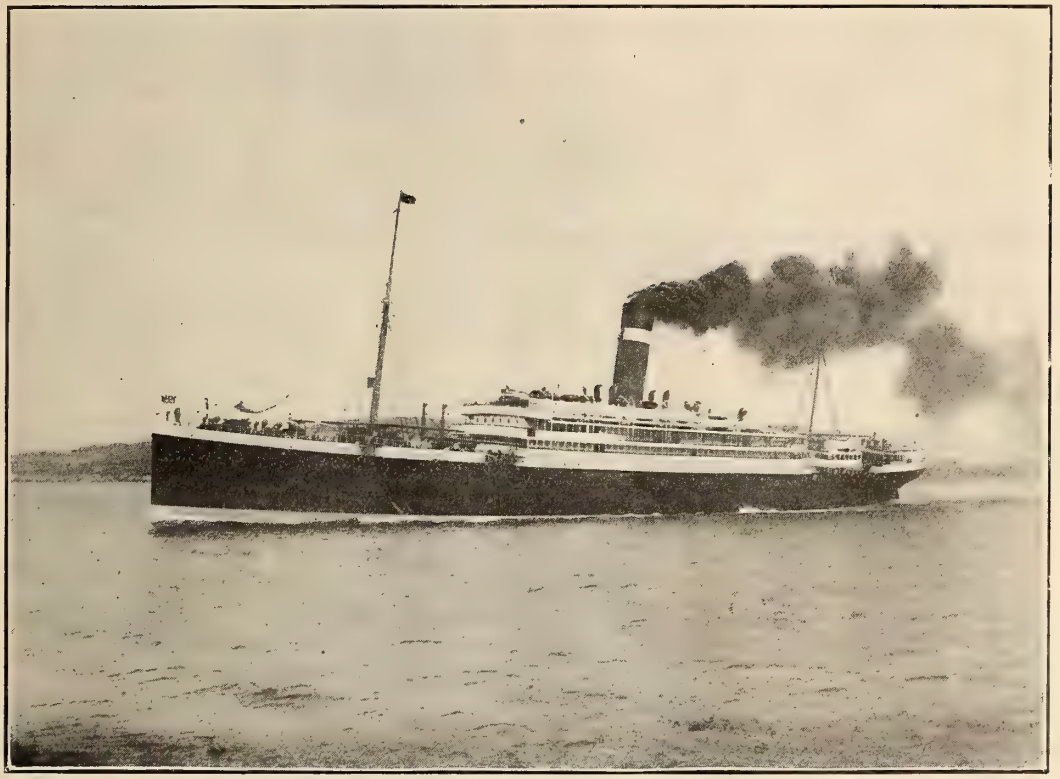
Flour, Cement, Sashes and Doors, Beer, Malt, Soap, Harness, Saddlery, Tents, Mattresses, Woollens, Butter, Confectionery, Lumber, Foundry Goods, Oatmeal, Cereals, Cigars.

A LARGE ABATTOIR IS ALSO OPERATED AT CALGARY, AND OTHER INDUSTRIES ARE COMING.

For further information apply to: C. W. PETERSON, Secretary, Board of Trade, CALGARY, ALBERTA.

Allan Line ROYAL MAIL STEAMERS

ESTABLISHED 1854.



TRIPLE SCREW TURBINE S.S. VIRGINIAN, 12,000 TONS, 18 KNOTS.

The Allan Line is marked by several distinguishing features :
It is the Premier Steamship Line between Great Britain and Canada.
It was the first Line to use steel instead of iron in shipbuilding.
It was the first Line to adopt bilge or side reels to minimize rolling.
It was the first Line to use protective or " covered in " decks for comfort.
It was the first Line to instal the electric light on its vessels.
It was the first Line to adopt the Turbine as an improved propelling power.

These improvements, or most of them, have since been adopted by other Lines. " Imitation is the sincerest flattery."

The Liverpool Service now consists of the twin screw steamers Tunisian and Ionian, 10,000 and 9,000 tons respectively, and the two New Turbine Steamers, each the counterpart of the other, and not excelled in beauty of design, perfection of ventilation, or luxurious appointments by any steamer afloat.

Their average speed is 17 knots. Best passage, 5 days, 14 hours, 30 minutes. Twin Screw Steamers Tunisian and Ionian complete the Weekly Service. They make the passage regularly between Liverpool and Montreal in 8 days.

Two New Steamers, each 11,000 tons, are now under construction to take their place on the Line in 1907.

The Cuisine maintained on the Allan Line is deservedly popular. The best the markets of Liverpool and Montreal afford, prepared and served by a well tried staff, assures the traveller an enjoyable trip, and the freedom from vibration guaranteed by the turbine engines makes a trip on an Allan Liner a pleasure.

Rates are very reasonable. Apply to any Agent, or

H. & A. ALLAN, Montreal

EVERY ESSENTIAL FOR SUCCESS IS OFFERED TO MANUFACTURERS AND WHOLESALE DEALERS AT



KAKABEKA FALLS, NEAR FORT WILLIAM, NOW HARNESSED.
Producing 30,000 horse power of electrical energy, distributed at Fort William.

FORT WILLIAM, ONTARIO

THE GREATEST CANADIAN SHIPPING CENTRE ON THE GREAT LAKES

RAW MATERIAL

No point offers such advantages for the assembling of Raw Material as Fort William, which has direct communication by water with the iron regions, hard and soft wood forests, and shipping points of Canada and United States.

MARKETS

The market for manufacturers at Fort William is practically unlimited, being the whole Canadian West, and a large part of Eastern Canada, with a population increasing with enormous rapidity, and creating an immediate demand for implements, building material, wire fencing, tools, and every other line of manufactured article.

TRANSPORTATION

Lake freights upon such raw material as cannot be produced on the spot are exceptionally low to Fort William, as the universal shipments of grain via the Great Lakes allow vessels to bring cargoes up at rates lower than to any of the Georgian Bay or other parts of the Lake system.

From Fort William radiate the three great trans-continental railways, the Canadian Pacific, Canadian Northern, and Grand Trunk Pacific, making every town, village, or siding in the west tributary to Fort William.

ELECTRICAL ENERGY FROM WATER POWER

The development of the Kakabeka Falls close to the town makes cheap power available in any quantity for large or small industries. The Kaministiquia Power Co. is now prepared to make contracts for furnishing power as required by manufacturers at Fort William.

HARBOR FACILITIES

The deep-water river harbor of Fort William with a water frontage of upwards of **twenty miles** gives opportunities for the construction of wharves where the largest vessels on the lakes drawing **22 feet of water,** can take on and discharge cargoes without danger from storms or winds.

There is nothing that is required by the Settlers of the North-West that cannot be manufactured to advantage at Fort William.

W. J. Copp & Sons, formerly of Hamilton, are successfully manufacturing stoves and ranges here. The Canadian Iron and Foundry Co. has located a large factory here for the manufacture of car wheels, cast iron pipes, and other heavy castings, employing about 300 men. A Tool Factory and a Paper Mill will shortly be erected here, and a large Shipbuilding Industry and Graving Dock has purchased a site on the water front in Fort William. The J. I. Case Co. of Racine, Wis., has bought the site for its Canadian works here. The Ogilvie Flour Mills Co. has just completed the building of one of the largest flour mills in Canada at Fort William, and a second flour mill of equal size is now in contemplation at this point. The grain shipments employ not only the immense terminal elevators of the railway companies, but also three independent elevators owned by the large exporting firms of the West.

NOW IS THE TIME TO LOCATE IN FORT WILLIAM, AND SHARE IN THE RAPIDLY INCREASING PROSPERTY OF THE CANADIAN WEST.

Address Correspondence to the Secretary :

BOARD OF TRADE FORT WILLIAM

JOHN LYSAGHT, LIMITED

THE EMPIRE'S LEADING
MAKERS OF

GALVANIZED SHEETS
BLACK STEEL SHEETS







HEAD OFFICE: BRISTOL, ENGLAND.

CORRUGATED IRON
POULTRY NETTING

A. C. LESLIE & CO. - MONTREAL

MANAGERS CANADIAN BRANCH

THE HUB OF THE HARD WHEAT BELT OF WESTERN CANADA

SASKATOON

THE METROPOLIS, RAILWAY CENTRE, AND DISTRIBUTING POINT OF THE CANADIAN MID-WEST

THREE TRANS-CONTINENTAL ROADS :

THE CANADIAN PACIFIC
THE GRAND TRUNK PACIFIC
THE CANADIAN NORTHERN

NOW ENTER THE CITY,

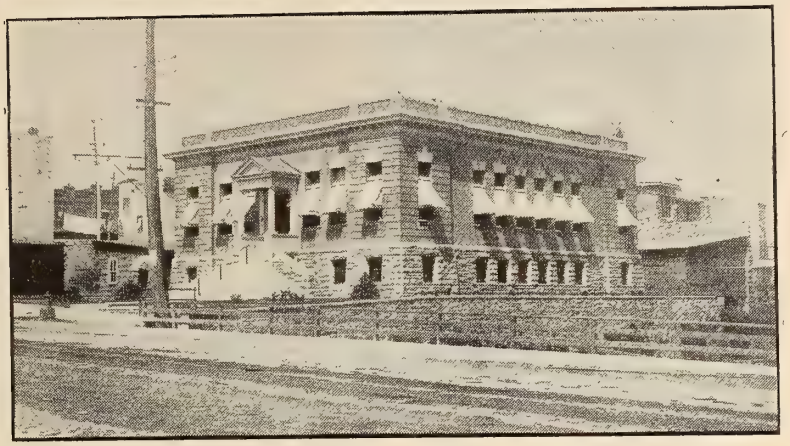
POPULATION 1901	- -	**98**
POPULATION 1906	- -	**5,000**

A Municipal Power Plant will provide Power to Manufacturers established in the city.

FOR ALL INFORMATION ADDRESS :

JAMES WEIR, *Comm'r Board of Trade,* **SASKATOON, SASK.**

THE E.B.EDDY WARES



HERE SINCE 1851

Counting House

AND A PORTION OF THE WORKS OF



THE E. B. EDDY COMPANY

LIMITED

HULL :: CANADA

MANUFACTURERS OF AND WHOLESALE DEALERS IN

MATCHES, Parlor, Sulphur, &c. **PAPERS** of all kinds.

PAPER BAGS, all sizes and weights. **WOODENWARE,** in Tubs, Pails, &c.

WASHBOARDS in the newest and most improved styles.

FIBRE WARE in Tubs, Pails, Etc. Etc. Etc. Etc.

ALWAYS GUARANTEED FULLY

Branches and Agencies at Montreal, Toronto, Quebec, Ottawa, Hamilton, London, Kingston, Brockville, St. John, N.B., Halifax, Winnipeg, Victoria, Vancouver, Calgary, Edmonton

FREE FROM FACTORY FAULTS

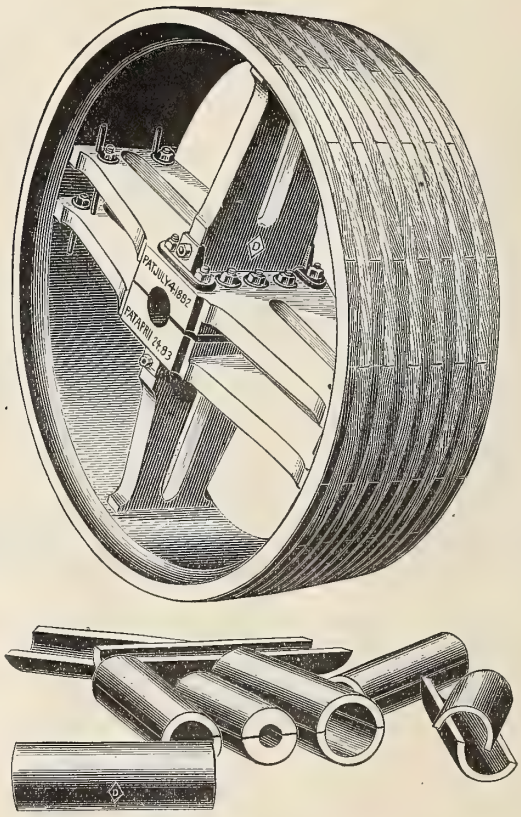
ALWAYS, EVERYWHERE IN CANADA, ASK FOR EDDY'S MATCHES

NONE SO GOOD AS DODGE

Some enterprising dealers may toot about something better than has been in the way of Wood Pulleys.

But really when you get right down to business don't the pulleys speak for themselves?

Why does the "DODGE" Pulley bring about 10% better price than any other?



For the year ending June 30th, 1906, we sold more DODGE Pulleys than ever before in our 20 years' history, and during the year we have had several customers come back to us, satisfied that the "just as good" cry is N. G. in the case of Wood Pulleys. Compare ours with any other make

SOLE MAKERS:

DODGE MANUFACTURING CO.

TORONTO = = MONTREAL

★ Skates and Hockey Sticks ★



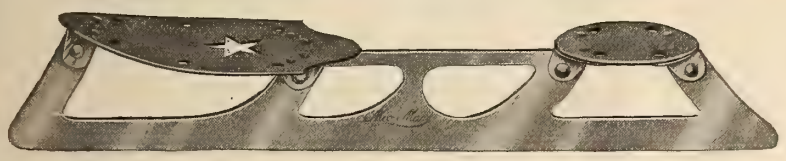
THE NEW 1906 VELOX

Has met with a most gratifying reception from Professional and Amateur Hockey Players in both Canada and the United States.



THE REGAL

—With Box Bracket and Re-enforced Hee —as designed originally by us—is highly recommended and fully guaranteed.



THE EVER POPULAR

FEATHER-WEIGHT MIC-MAC

The Speediest Skate made for Hockey. Finest quality only of Sheffield Cast Steel, hand-tempered by our special process.

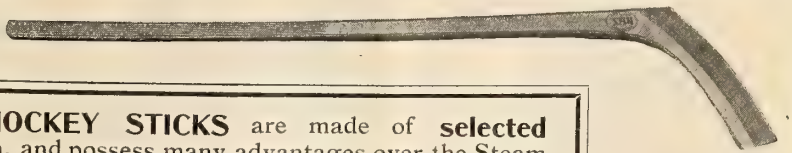


THE GRACEFUL

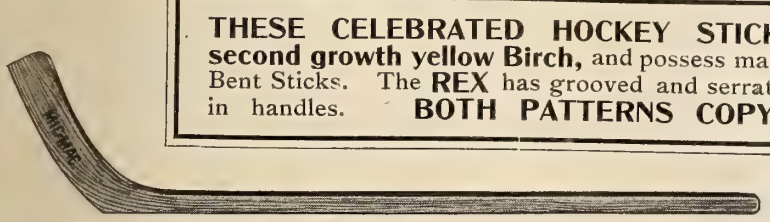
LADIES' BEAVER

The Handsomest Skate for Ladies' use in the Market—Made with Plain or Flanged Runners.

Rex



THESE CELEBRATED HOCKEY STICKS are made of **selected second growth yellow Birch,** and possess many advantages over the Steam Bent Sticks. The **REX** has grooved and serrated blades, and also serrations in handles. **BOTH PATTERNS COPYRIGHTED AT OTTAWA.**



Mic-Mac

Write for Illustrated Catalogue which describes our full line of twenty-five different designs in Skates and also the Celebrated REX and MIC-MAC HOCKEY STICKS.

THE STARR MANUFACTURING CO., LIMITED

(Sole Makers of Genuine Acme Club Skates)

DARTMOUTH, NOVA SCOTIA and TORONTO, ONTARIO - CANADA

The Globe

IS THE ONLY PAPER IN CANADA

1. That publishes "London Times" Cables
2. That publishes "New York Times" Financial articles daily
3. That publishes a half tone Illustrated Supplement
4. That has a Western Editorial Representative in Winnipeg
5. That maintains its own offices in London (England), Montreal, Hamilton, Winnipeg, New York and Chicago
6. That publishes morning and evening editions with a circulation of over 50,000 copies

THE GLOBE,
TORONTO, CANADA.

THE

Standard Ideal Sanitary Co., Limited

Manufacturers of
Cast Iron, Porcelain Enamelled

Bath Tubs,
Lavatories,
Sinks, Urinals,
Etc., Etc.

Our NEW CATALOGUE is now ready and will be mailed on request.

Factories and Head Office
PORT HOPE, ONTARIO, CANADA.

LOOSE-LEAF SYSTEMS
CRAIN
OTTAWA, ONT.

TORONTO OFFICE—18 Toronto Street.
MONTREAL OFFICE—74 Alliance Building; 107 St. James.
WINNIPEG OFFICE—11 Nanton Block; 430½ Main Street.
ST. JOHN, N.B.—Schofield Bros.
VANCOUVER, B.C.—White & Bindon.

You Require

Something up-to-the-hour in the Loose-Leaf line.

THE

Crain Continuous Ledger (Patented)
Crain Fold-Over Invoicing System (Patented)
Crain Fold-Over Bills of Lading (Patented)
Crain Monthly Account System
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Are all recognized leaders. We manufacture everything in the Loose-Leaf line.

The Crain Stock Continuous Ledger
complete with transfer binder, and 500 leaves (1000 pages) in 8 x 12 size, **$21.00**; 12 x 12 size **$23.75.**
With this outfit we supply our best Ledger Binder. **We do not substitute a cheaper binder to reduce cost.**

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THE Rolla L. Crain Co
LIMITED.
OTTAWA, CANADA.

Industrial Canada.

ISSUED BY

The Canadian Manufacturers' Association,

Incorporated.

"There be three things which make a nation great and prosperous: A fertile soil, busy workshops, and easy conveyance for man and goods from place to place."—Bacon.

Vol. VII. TORONTO, OCTOBER, 1906. No. 3.

INDUSTRIAL CANADA

Issued monthly as the the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

COMMITTEE.

GEO. BRIGDEN (Chairman).

S. R. HART. C. R. MCCULLOUGH. S. M. WICKETT.
R. A. DONALD. J. M. SINCLAIR. J. J. MCGILL.
AND THE GENERAL OFFICERS OF THE ASSOCIATION (Ex-officio).

Subscription—One Dollar per Year. Single Copies, 10 cents. Advertising Rates made known on application.

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General Secretary: J. F. M. STEWART.
Business Manager: G. M. MURRAY.
Editor: F. P. MEGAN.
Advertising Manager: B. L. ANDERSON.

THE YEAR IN THE ASSOCIATION.

THE Winnipeg convention rounded off the work which the Association has been accomplishing during the past year. As the Association expands and increases the number of activities into which it enters, it must delegate more and more of its work to the various standing committees. The thoroughness with which these enter upon a subject was shown in the admirable and exhaustive reports which were submitted. In most cases the problems had been so effectively treated that it required but the approval of the convention for the work which was done. The Association has been happy in the men whom it has been able to enlist in its services. Men of outstanding ability have ever been ready to take on the laborious duties consequent upon appointment to committees. In this lies one of its greatest sources of strength.

Many questions of wide interest, too, came up for discussion in the general meetings of the convention. The advantage of getting the opinions of men who, on account of location or temperament, see different phases of the subject, is inestimable. There is wisdom in numbers. At this convention there were men from one end of Canada to the other. As a consequence no policy was adopted without its effect on all parts of the country being known.

Nor can the influence of the fraternizing between men of the East and men of the West be neglected. The growing importance of the vast territories west of Superior only becomes appreciated after one comes into contact with the country and its people. In a few short years Winnipeg has become a big cosmopolitan city, with fine homes, imposing business blocks and wide, well-paved streets. Extensive waterpower is now being developed, so that before long manufactures will receive this additional impetus. The division into East and West is disappearing, and the aspirations and needs of all sections are becoming as one.

With gratitude the many kindnesses of the people of Winnipeg and Manitoba are recorded. Hospitality was extended on every side. With true Western enthusiasm the Manitoba members took up the question of the convention, and the result was most satisfactory. The attendance was large and representative. The entertainment left nothing to be desired. The meeting will linger long in the memory of those who were present.

LABOR AND INTEREST IN CANADA AND BRITAIN.

REFERRING to a statement to the effect that the Canadian tariff on British manufactured goods should "be high enough to offset the greater cost of labor and the higher rates of interest," the Toronto Globe says:—"The *general tariff* already does this and more." But the general tariff is not the tariff on British goods. It is probable that if the tariff on British goods averaged as high as the present general tariff does and the general tariff averaged 33 1-3 per cent higher very few manufacturers would complain. The present general tariff applies to American manufacturers and it does not shut them out of Canada. Indeed we import more manufactured goods from the United States than from Britain. If a tariff on British goods averaging as high as our present general tariff would shut British goods out of Canada then American manufacturers under a policy of high protection must have completely distanced and surpassed the manufacturers of free trade Britain.

As regards the difference in the cost of labor and interest Mr. C. C. Ballantyne in his retiring address as President of the Canadian Manufacturers' Association instanced the case of one of the members of the Canadian Manufacturers' Association who had large factories in Montreal and London, England. The pay-rolls of these factories showed that common labor is 82 per cent higher in Canada than in England,

gang leader or sub-foreman 70 per cent. higher, boys (16 to 18) 85 per cent higher, machinists, 64 per cent. higher, carpenters 40 per cent. higher, girls (by the hour) 33 1-3 per cent. higher, and girls (piece work) 66 2-3 per cent higher.

Mr. Ballantyne commenting on these figures said:—

"Are not these figures alone sufficient to show the necessity of maintaining an equalizing tariff against British goods? But if, while giving our manufacturers fair play in competition with British manufacturers, we make our tariff so high against all foreign countries that our surplus requirements, above what our own factories can supply, will be obtained from British manufacturers, a vast amount of money which now goes to enrich foreign countries will be turned into the pockets of British manufacturers and their workingmen."

THEIR INTERESTS IDENTICAL.

"The farmers and wage workers have an identity of interests in the fiscal legislation of the Dominion."—Toronto Globe, September 6th, 1906.

This is perfectly true. Every dollar spent on Canadian manufactured goods makes work for Canadian workmen. Every dollar spent on goods manufactured in the United States which could be made in Canada means a loss of work for Canadian workmen. Every additional workman employed in a Canadian factory creates an increased demand for Canadian farm products, for the workman's family must eat and the merchants, carpenters, builders, painters, tailors, dressmakers, milliners, doctors, school teachers, ministers and others who supply the wants of workingmen in the cities, towns and villages of Canada are all consumers of Canadian farm products, whereas the same class of people in the United States buy American farm products. The farmers and workingmen are, therefore, interested alike in the maintenance of a policy of protection which will so far as possible shut out of Canada goods made in the United States.

MUTUAL FIRE INSURANCE.

NO apology need be offered to our readers for the liberal space devoted in this issue to the report of the meeting, held in Winnipeg, of the members interested in the organization of Mutual Fire Insurance Companies. The report of the meeting is so full and complete that further extended reference to the subject seems scarcely necessary, and it is not our intention to refer to or deal with the considerations that influenced the Insurance Committee of the Association in the recommendations that were brought before the meeting referred to. The report of the proceedings must and will speak for itself.

It must, however, be gratifying to the Insurance Committee to know that at both the meeting of interested members, and the regular session of the Association, the seal of complete approval was placed on their work and recommendations by unanimous vote. Less was not to be hoped for or expected, and that it was so heartily accorded offers the best augury for a successful future for the companies when they are organized.

In addition to the very excellent reports of the proceedings given by the Winnipeg newspapers, several special leading articles have appeared dealing with specific features of the Association work, and perhaps one of the most ably written was one on the subject of "Mutual Fire Insurance," which appeared in the "Free Press," of the 19th of September. We regret we have not room to republish this in full, for it is worthy of reproduction, not because it endorses the proposal to organize Mutual Companies, but because it takes a broad view of the question and concisely and adequately summarizes the situation from the general standpoint. The two concluding paragraphs of the article are specially apropos and we venture to quote them:—

> "Upon the satisfactory records of mutual companies, the Manufacturers believe they are justified in adopting the mutual principle of insurance against loss by fire. It is not questioned that on the whole the business of the stock companies in Canada has been of an unsatisfactory kind, but it is maintained that the losses sustained have been in a very large degree due to conflagrations. Manufacturers' risks, it is held, are generally located outside the conflagration area. Generally speaking, this is true; but in cities like Winnipeg, Montreal, Quebec and Toronto, there are numbers of factories that certainly are exposed to the conflagration hazard.
>
> "Upon their insurance venture the Manufacturers are proceeding cautiously. The individual risks will be limited to $5,000 upon any one plant. This is a wise step. But it cannot but be admitted that protection against fire is a matter of serious import, rendered more so by its growing cost. In their efforts to minimize their burden in this respect, the Manufacturers are to be commended. When they place upon their own shoulders liability for loss from fire there will no doubt result an improvement in the character of buildings put up and in a general way increased carefulness with regard to prevention of fires."

In the very nature of things, and by all the traditions that surround the history and conduct of mutual insurance companies, the operation of such companies inevitably tends to a reduction in the fire waste, and because of it to an appreciable reduction in the insurance cost. This is so readily demonstrable that the work incidental to the organization of the companies now authorized bears a patriotic as well as an individual benefit that inspires increased activity in overcoming any obstacles that may exist or remain to prevent their full fruition.

A REVISED BILL OF LADING.

THE acceptance by the Canadian Pacific Railway Company of responsibility for loss from fire is an innovation in railway practice. It is another step toward the accomplishment of an improved form of railway bill of lading, which has been agitated by the Canadian Manufacturers' Association for some years. The Railway Commission has already modified the clauses relating to demurrage charges, and it goes without saying that the conditions limiting liability of railways for loss from fire will now have to come out. There are many other unreasonable clauses in the bill of lading, some of them in conflict with the spirit of the Railway Act, and others practically obsolete and unsuited to present-day conditions. It is expected that these will be taken care of when the Railway Commission revises the railway contract forms. This should be done without delay. There ought to be nothing to prevent the adoption of the form advocated by the Canadian Manufacturers' Association, namely, a plain bill of lading, which is a receipt

for the property, and an undertaking to carry the same without any restrictions of liability except those allowed by law.

PROTECTIONIST FARMERS.

THOSE Canadian newspapers which are opposing the demand of the Canadian Manufacturers' Association for more thorough protection of all Canadian industries, farming, fishing, mining and manufacturing, always assume that the farmers as a body are opposed to protection. As a matter of fact a very large number of Canadian farmers believe in protection. A considerable proportion of the farmers who appeared before the Tariff Commission asked for increased protection, and Mr. Fielding, himself, has pointed out that some of the strongest appeals for a higher tariff came from farmers. The Farmers' Association is undoubtedly opposed to protection, but there is no proof that that Association represents the views of Canadian farmers in general. Its membership is small. Its leaders were closely identified with the old Unrestricted Reciprocity agitation which nearly ruined the Liberal party some years ago, an agitation which drove Edward Blake out of Canadian politics, an agitation which was never approved by Oliver Mowat.

There was a time when the tariff was practically the only issue between the two political parties. If the free trade newspapers are right in saying that all the farmers of Canada are free traders, how did it happen that many rural constituencies voted steadily for the Conservative party in all the elections in which the tariff was the only issue? Manitoba is now beginning to become a manufacturing province, but it was then a purely agricultural country, yet it supported the Conservative party by a large majority so long as the question of protection was the leading issue between the two parties. Many of the most purely rural districts in Ontario, Quebec and the Maritime Provinces, did the same. There is nothing to indicate that free trade sentiment has since increased among farmers. On the contrary there is reason to believe that the patriotic desire to see Canadian industries develop has caused a great decline of free trade sentiment among farmers. The old prejudice against Canadian manufactured goods has disappeared. It pays now to mark goods "Made in Canada," and this revolution of sentiment in favor of Canadian goods must have lessened the antagonism of many farmers to the policy of protection which was largely founded on the prejudice against Canadian manufacturers which the free traders persistently cultivated.

AN IMPORTANT VOTE.

THE passage by the Sixth Congress of Chambers of Commerce of the Empire of the Canadian resolution in favor of mutual preferential trade, moved by Mr. George E. Drummond, deserves more attention from the Canadian press than it has yet received. It created a new situation for it showed that the movement for preferential trade has made extraordinary progress in Britain during the last three years. The official report issued by the London Chamber of Commerce states that the resolution was "carried by an overwhelming majority amid the greatest enthusiasm," and a demand for a vote by Chambers showed the following result:—

For	105
Against	41
Neutral	21

It cannot be said that the British merchants and manufacturers who voted for that resolution did so under any misunderstanding of what Mr. George E. Drummond and the Canadian manufacturers meant by it. Mr. Drummond's resolution was preceded by a speech thoroughly explaining the attitude of the Canadian manufacturers on this question. Moreover, on several previous occasions, Mr. Drummond had explicitly explained the policy of the Canadian manufacturers to the Chambers of Commerce, and when the Canadian Manufacturers' Association excursion party were in England last year, Mr. W. K. George, Mr. W. K. McNaught, and other leaders took pains to state the Canadian view of the preferential trade in the clearest possible way, in order that there might be no misunderstanding.

EDITORIAL NOTES.

The Ottawa Government is expected to do its duty for free industrial alcohol.

We would call attention to a special review article on "Statistics and National Progress," printed in another column. How many of our newspaper men have given serious study to statistics? What data are necessary for a sound conclusion? Members of Parliament and other political speakers flash out figures, and everyone is dumb. Why not have a statistical section to our newspaper clubs?

The Deputy Minister of Labor has published a pleasing memoir of his late assistant, who met his death so nobly in the Ottawa, entitled "The Secret of Heroism." It was out of place, however, for him to bring into such a volume the attitude of the manufacturers to the "Labor Gazette." Someone, probably a politician, is made to remark that in asking for a quarterly instead of a monthly issue the manufacturers would be glad if the "Gazette" appeared at still wider intervals, or not at all. That statement is not fair. The manufacturers wish well to the "Labor Gazette," but they want valuable studies of labor problems made. They do not favor chronicling useless gossip at the public expense. A quarterly issue like the publication at Washington would assuredly help matters and be in the interest of manual labor as well as employers of labor. Let organized labor look into this.

Already 160 complete sets of catalogues have been sent by the Secretary of the Canadian Manufacturers' Association to Canada's Commercial Agents abroad. These have gone to Birmingham, Leeds, Manchester and Bristol, England; Paris, France; Sydney and Melbourne, Australia; Yokohama, Japan; Mexico City, Mexico; St. John's, Nfld.; Christiana, Norway; and Cape Town, South Africa. Manufacturers who desire to do an export trade should take advantage of this opportunity to keep their goods before the attention of these countries. The work of the Commercial Agents is made much more valuable by having these catalogues and price lists beside them. Manufacturers who have not already done so should send in to this office sets of thirteen catalogues in order that they may be forwarded to the Canadian Agents. One copy is kept on file in the Secretary's office for reference.

A request has come also that all the Commercial Agents abroad be placed on the mailing lists of manufacturers in order that they may receive changes of prices, revised catalogues, etc. This will bring their work up to date and will improve the service.

ADVERTISING CANADIAN INDUSTRIES

By J. ANGUS MacDONALD
Author "Successful Advertising—How to Accomplish It."

How to Work a Follow-up System.

It is one proposition to be able to land enquiries from ads., but quite another to turn these enquiries into orders.

"What we want is orders, wrote the Hebrew wholesale clothier to his salesman, who persisted in writing in long-winded letters regarding promises and prospects. Many a Canadian manufacturer to-day prefers definite, actual orders to prospects more or less intangible. But catching business, you know, is like catching trout—after the bite, skilful angling is required, and it is the clever manipulator who lands the prizes. The "Follow-up-System," with its hooks nicely baited with ingenious arguments, is a business fishing tackle muchly used nowadays.

The "Follow-up-System," like most mundane institutions, has its defects as well as its advantages. I have known it to convert passive friends into warm enemies. Once upon a time I wrote to a School of Something for its prospectus, and for three months afterwards was followed up by a "Follow-up-System" fiendish in its persistency and intensity. As a result I could not be hired to take a course from that institution. A busy housewife wrote for a booklet regarding some new-fangled labor-saving device for the kitchen. She did not buy the machine, but she unwittingly started a follow-up machine in operation. That "Follow-up-System's" working was a caution. It followed her to the extent of ten different visits by mail, and it made at least one enemy, for she pales with anger when she mentions it.

When a "Follow-up-System" is operated with some consideration for the intelligence of the person addressed, then it is generally accepted as a reasonable plea for business. But when it is flippant, or even vulgar (as many are), or when it becomes insistent and persistent to the degree of creating weariness or annoyance, then the "Follow-up-System" loses its business qualities, and becomes instead a mere nuisance. In this case it can be more truthfully and alliteratively termed a Swallow-up-System, for it swallows up the advertiser's money without bringing in returns.

Now, the business that does advertising of any consequence should have a "Follow-up-System" of some kind. In many cases there are more enquiries than orders direct from the ads. In all cases there are inquiries. Wherever there are enquiries and "prospects" it is up to the "Follow-up-System" to turn them into cash-clinking orders.

It stands to reason that the "Follow-up-System" should be written especially to perfectly fit the business. Some goods require more describing than others. Some goods appeal to the wealthy. Some goods appeal to popular demand. Some articles appeal to men, some to women; some to a professional class, and so on. The writer of a "Follow-up-System" should study his clientele as well as his wares, then produce matter accordingly. He should surely gauge the intelligence and conditions surrounding the recipients.

Let us assume that a Canadian manufacturer selling to two classes of retailers, viz., important city merchants operating big department stores and smaller merchants running stores in small towns and rural districts, wished to prepare a "Follow-up-System" to go with his catalogue or booklet. Obviously, the thing for him to do is to have written two distinctly different "Follow-up-Systems," one for city recipients and the other for the other class. Department store merchandise is bought by a corps of buyers. Each buyer works sixty minutes in the hour looking after his department or departments. He has duties and responsibilities of great importance. He has no time for matters not absolutely essential to his work in hand. He has no time to read long-drawn-out "Follow-up-Systems"; in fact, such persistent missives annoy him. But he may be induced to glance at the catchy, clever, brief epistle, and he has no objection to several coming his way. If they are especially good, the chances are that he will save them to show the advertising manager of the store as specimens of good advertising. Beyond this he may be sufficiently interested to place an order for some of the goods. The "country merchant" has more time. Life is not so strenuous. His mail is not so heavy. A stream of drummers is not always following him. The letter or series of letters descanting on a certain line of goods usually receives his attention—no matter if it is a little long. Therefore, as conditions surrounding a city buyer are totally different to circumstances about the rural buyer, each should be approached with a distinctive "Follow-up-System."

In sending out literature through the mail, bidding for business, remember that Monday is the poorest day in the week for it to reach busy business people. The reason is simple: mail is heaviest that day, and in a mass of mail only the important communications usually receive full consideration. Circulars, circular letters and form letters stand a good chance of being swept inside that handy willow office assistant, known as the waste basket.

The usual "Follow-up-System" is made up of a series of three or four letters—one to go with the booklet or catalogue, the others at intervals of ten days. Within a month the entire batch is sent to the individual. If no indications of business result within these thirty days the name is considered "a dead one." In extreme cases a dozen letters have been known to make up the full "Follow-up." They certainly were extreme cases.

Each letter of the system in itself should be so strong and distinctive a plea for business as to "stand on its own bottom." All arguments should not be given in the first appeal. Have each letter bristle with different arguments and interesting with different word constructions.

It seems as though most "Follow-up-Systems" are too tinctured with we, we, we. It should be you, you, you—how it is to your advantage to buy here. The average business man receiving a letter appealing for business does not give a continental about the people who write him—what interests him is that eternal dollars-and-cents question: Is it to my advantage to buy these goods at these prices? Satisfy him on this all-important point and the trade is pretty nearly consummated. It may be well to have enough of the we in a letter to indicate the standing and stability of the concern, but the great point is to make the letters interesting with statements that appeal to the reader's pocket-book and judgment.

Now, to get back to a mild criticism of too much "we" in the "Follow-up-System," here are some comments upon four letters before me. The first opened up with:

> "*We* take great pleasure in mailing you a copy of *our* catalogue for the spring and summer season of 1906. This is in response to your enquiry relative to *our* ad. in Blank Blank, and *we* feel reasonably sure that a perusal of *our* catalogue will result in our getting an order. Thus far *we* have not had the

pleasure of doing business with you, but *we* hope," etc., etc.

The italics are mine. Note how the writer's imagination does not seem to get outside the four walls of his establishment. What is there to interest the recipient? Apparently nothing, for the second letter went out. It began thus:

> "Recently *we* mailed you our spring and summer catalogue for the current year, and as yet, not having the pleasure of hearing from you, *we* mail this second letter. *We* are in a position to offer you the best market advantages. *Our* prices are the lowest. *Our* goods are strictly high-grade. *Our* assortments are such that the most diversified tastes can be suited. *Our*," etc., etc.

How stiff and conventional and full of the ego! The third letter commenced in this style:

> In *our* last two communications to you (the first went with *our* catalogue, spring and summer, 1906), *we* indicated that *we* were in a remarkably strong position to offer you superior values. This *we* again confirm, and *we* also, too, respectfully call your attention to *our* facilities for making quick deliveries. *We* note that *our* trade require timely offerings, and in this *we* are," etc., etc.

Were strong, specific points that meant something to the reader's bank account brought out there might be some signs of orders. But the correspondent dictated to the weary typewriter a fourth effusion, which opened up with:

> "*We* are somewhat surprised that, as yet, *we* have not heard from you in answer to *our* recent letters with catalogue, which was duly mailed you on request. *Our* goods, prices and varieties *we* consider to be about the most attractive offerings in the market. *We* are in a position," etc., etc.

One great advantage the human salesman has over the cold, printed piece of advertising literature is that the salesman can throw his *personality* and *enthusiasm* into his soliciting. If advertising only could, then King Advertising would be the ideal salesman. Most advertising is too stiff, conventional, "dignified." To make a sale you must talk "straight goods," and put an edge on that talk. Create a desire! Keep the desire hot! Get in the atmosphere of the man you are talking to and move him by your specific say-so regarding the merits of your offerings and the great advantage in dealing with you.

A good "Follow-up-System" is a splendid business builder. It is constantly reaching out for new customers—what every business must have. But the letters must be *rightly written*, and in same breath, rightly *printed* and *typed*. Printed typewritten letters from a poor printer gives the whole system away. It is possible to get a printed typewritten letter (with the name, address and date filled in by a typewriter) so perfect that it would take a Sherlock Holmes to detect the fact that it came off a printing press.

Such are the sort of letters to use in your next "Follow-up-System."

CLAIMS FOR LOSSES.

The trouble in securing adjustment of claims against railways for loss or damage to goods in transit is common to every shipping industry. A great deal of the delay experienced is no doubt accounted for by the slow methods of investigation adopted by the railways and a disinclination on the part of some carriers to live up to their rightful obligations. On the other hand, there are many instances in which the non-settlement of the claim is due to absence of method in dealing with such matters on the part of the shipper or consignee.

A case has recently been brought to our notice which will illustrate the point. A shipment from Toronto to Winnipeg was received at destination by a representative of the shipper, who gave the railway a receipt specifying that the package was in good order. Some three weeks or more afterward the goods were unpacked, when it was discovered that there was a shortage. The consignee then reported the loss to the shipping house, who made claim upon the railway for the amount thereof. An investigation by the Freight Claims Department failed to account for the shortage, and when the agent at the point of destination was communicated with he reported that the consignee had given a clear receipt for the goods and had not made any subsequent complaint of loss. By this time two or three months had elapsed, and it was absolutely impossible for the railway to verify the shortage. Under the circumstances the claim was declined.

How easy it is to avoid such difficulty! All that is necessary is for consignees to refrain from giving receipts specifying that shipments are in good order when there are indications to the contrary. Wherever parcels bear outward signs of having been tampered with or roughly used consignees should invariably note the fact upon the receipt which is given to the carrier, and when the goods are unpacked the railway should be requested to send a representative to inspect the loss or damage in order that there may be no doubt or misunderstanding of the matter when the claim is subsequently rendered.

Sometimes goods are pilfered or damaged in transit, though the packages do not bear any indications of having been tampered with or roughly used, and in such cases a clear receipt would be given to the railway. It is a simple matter, however, when the loss is revealed to notify the representative of the railway and request him to make an immediate inspection. If there is a shortage it is usually apparent as soon as the parcel is opened; either the balance of the goods will have been disturbed or there will be a vacant space where the pilferage occurred. If there are no such indications, then it is natural to suppose the missing goods were never shipped.

It is not unreasonable that railways should expect their representatives to be permitted to inspect shipments which are claimed to be not in good order, as soon as the loss or injury is discovered, so that they will be able to verify for themselves the statements which are the foundation for the claims against them.

The attention to such details is of the utmost importance to every receiver of freight, and yet how many of our large shippers see to the protection of their interests by fully instructing their agents and consignees in these matters? The carelessness of consignees in giving clear receipts for shipments without taking the trouble to inspect the parcels is simply astonishing. It would pay large shippers to enclose a small circular with their shipping invoices, directing consignees to inspect shipments before giving clear receipts, and where injury or loss is disclosed when the parcels are opened, to immediately request the railway agent to inspect the parcel, and at the same time notify the shipping house, giving details of the loss or injury. If this were done in all cases much of the trouble now experienced in securing an adjustment of freight claims would be avoided.

TRANSCONTINENTAL FREIGHT RATES.

The complaint of the Canadian Manufacturers' Association regarding discrimination in rates on traffic from Eastern Canada to Pacific Coast points has at last been ruled upon by the Railway Commission. An order issued at Vancouver on the 11th of August directs the Canadian Pacific Railway to cease and desist from charging the discriminating toll of five cents per 100 pounds, known as the "British Columbia terminal arbitrary," which was exacted on all traffic carried to Pacific Coast points in Canada. The rule of the tariff covering minimum weights for cars in excess of the standard length, 36 feet, is to be modified to conform to the Canadian classification basis, and allowances for blocking and racking freight are to be made on Pacific Coast traffic the same as to other points in Canada.

The main cause of complaint arising from the addition of arbitrary rates on traffic shipped from Eastern Canada over the rates applied from the adjacent United States territory has not been done away with. The Commission's order is silent with regard to this, but a notice, issued to the press on the authority of the Commission, states that the rates from Eastern Canada to the Pacific Coast are considered to be reasonable for the distance over which the traffic is hauled and for the character of the service involved. The lower rates from United States points are found to result from the competition of water routes by way of Panama and Cape Horn. This competition is said not to affect Canadian traffic, as there are no steamers plying between Canadian Atlantic and Pacific ports, and the coasting laws prevent the handling of Canadian traffic by the American steamship routes. The Commission seems to uphold the contention of the Canadian Pacific Railway that in accepting traffic from United States points at lower rates than they are willing to apply on traffic taken from intermediate Canadian points to the same destination they are able to secure a traffic which fills out their transcontinental trains and gives Canadian shippers a better service than they otherwise would have. The Commission appears to have decided that the discrimination against Canadian and in favor of American shippers is justified on the ground of competition.

Make Unfair Use of Tariff.

As we have already pointed out, the true explanation of the maintenance of higher rates from Canadian shipping points is found in the fact that the Canadian railways take an undue advantage of the existence of the Customs tariff. It is obvious that a shipper from Eastern Canada could not possibly sell goods in the British Columbia market in competition with shippers from United States points, and pay the higher freight rates which are now exacted, were it not for the protection afforded Canadian manufacturers by the duty. This fact has repeatedly been brought to the attention of the Government, notably during the sittings of the Tariff Commission, and in every case the complaining parties have been instructed to apply to the Railway Commission for correction of the wrong. In dealing with the complaint of discrimination in transcontinental rates the Railway Commission has apparently accepted the railway arguments as to competition by water and other rail routes, but has entirely ignored the fact that these could not stand were the Customs duty removed. It is surely an injustice that the railways should be permitted to take advantage of the fiscal policy of the Government to discriminate against Canadians in their freight rates. If this feature of the rate situation is not within the jurisdiction of the Railway Commission under the Act, then it becomes necessary for those who are being subjected to the injustice to appeal to the Government for relief from the present intolerable situation.

C.P.R. WILL INSURE FREIGHT.

An announcement of importance to the shipping public has just been made by the Canadian Pacific Railway. It relates to the responsibility of the Company for property damaged by fire while in its possession.

The bill of lading form in use by railway companies contains a condition which relieves them from responsibility for damage to goods occasioned by fire. This condition has always been looked upon by the public as a real hardship, and has been a fruitful source of irritation and contention between traders and railway companies. By many it is supposed that when railways accept property for carriage they are responsible to the owners for its safe delivery. It is usually after a fire loss has occurred that they learn that the bill of lading contract signed by the shipper relieves the railway of any such responsibility. Where the validity of this condition has been questioned the courts have ruled in favor of the railway, unless the fire could be shown to have arisen from some negligence, in which case the Railway Act provides that they must be responsible. For a shipper to prove that a fire on the premises of a railway arose from negligence on the part of the company is well nigh impossible, and it is safe to assert that no shipper would undertake the necessary trouble and expense except in extraordinary cases. The result has been to burden the public with practically all fire losses.

The Canadian Pacific Railway Company now proposes to assume responsibility as insurer against fire, from any cause, of all property entrusted to it for carriage. The insurance will continue from the time property is accepted from the shipper by the railway agent until it is taken from the Company's premises by the consignee, whether the goods are in cars in transit, standing in terminals, or in the warehouse at destination waiting delivery; in fact, so long as they are in the possession of the railway. No special action is necessary to secure the benefit of transportation at owner's risk of fire, the ordinary form of shipping receipt will suffice, and no change will be made in the freight rates on account of the new departure. In this the Canadian Pacific is accepting a greater responsibility than attaches to common carriers, even under the common law, but the object of the Company apparently is to remove all cause for grievance on the part of shippers in this particular. Hereafter, when a fire occurs along the line of the Canadian Pacific Railway the owners of property damaged or destroyed have only to promptly render a claim for the value to receive compensation from the company. Indeed, traders are invited to be prompt in sending in their claims, as it is the desire of the Company to establish a record for prompt payment of claims of this description, and this can only be done if owners send in their claims without delay.

The broad-minded attitude of the Canadian Pacific in this matter is, indeed, commendable, and we feel sure will be heartily appreciated by the shipping public. To those who give thought to the subject it will be apparent that there is an advantage in shipping by a railway line which assumes without any manner of doubt the full responsibility as insurer against fire, in preference to competing lines which, though charging the same freight rates, refuse to accept this responsibility.

A new telegraphic code has been devised by a Canadian, Mr. Chas. J. Mitchell, which it is claimed has marked advantages over other codes now in use. The work is of great simplicity and condensation, and yet provision is made for proving the accuracy of the transmission, which practically removes all chance of error.

THE WINNIPEG CONVENTION

A Complete Report of the Proceedings of the Thirty-Fifth Annual Convention of the Canadian Manufacturers Association. Held in the Royal Alexandra, Winnipeg, September 17th, 18th and 19th, 1906.

THE ANNUAL MEETING.

WINNIPEG, the young giant of the West, put forth all its attractions to greet the members of the Canadian Manufacturers' Association during the time of their annual convention on September 17th, 18th and 19th. From the moment that the big special train rolled into the station till it sped forth again on its excursion trip to the coast, bracing, sunny weather prevailed. Many subjects aroused the enthusiasm of the visitors during their short stay, but none compared in attractiveness with the climate. It was a revelation to those who saw Winnipeg then for the first time.

It is a far cry from Eastern Canada to Winnipeg, but the attendance of manufacturers was most gratifying. In numbers this year's convention compared favorably with preceding meetings, and the business was transacted with business-like despatch. All parts of Canada were represented in the congress of manufacturers. The reports of the various committees for the year were comprehensive, and gave ample evidence of the wide range of activities undertaken by the Association.

The Royal Alexandra was a fitting headquarters for such an assembly. The palatial hotel still retains all its charm of newness. The big, luxurious rotunda, embowered in ferns, made an admirable social meeting-place. There the delegates, with the ladies of the party, made busy scenes during intermissions from the sessions. The handsome dining-rooms, too, were regularly thronged with gay gatherings.



MR. HARRY COCKSHUTT
President, Canadian Manufacturers Association, 1906-1907.

Upstairs on the first floor the real business was transacted. The Secretary's suite was filled with members from early morning till the afternoon was past. Registration and the depositing of railway certificates, arrangements for the banquet, the issuance of buttons, with the countless other things which come up for settlement during a convention, were handled by the Secretary and his assistants. The smoothness with which the work was done gave evidence of much previous work of organization.

The large breakfast room on this floor was kindly granted by the hotel management to the Association for its meetings. Here were held both the committee meetings and the general meetings of the convention. In it, too, was extended the civic welcome on the opening afternoon, and it was the scene of the reception at night.

The kindnesses which the visiting manufacturers received, not only from their fellow-members in Winnipeg, but from everybody with whom they were brought into contact, can never be told. They were received into the clubs as members; they were entertained magnificently by Mayor Sharpe and the city council; the Lieutenant-Governor, Sir Daniel McMillan, threw open his fine house and grounds for their entertainment; they were the guests of the Real Estate Exchange in an automobile trip around the city; while Mrs. Drewry received the ladies of the party at the pretty house of the Country Club. Many private courtesies were also shown, for which the Association, and more particularly the members who had the good fortune to visit Winnipeg this year, will ever feel grateful.

The Winnipeg convention and the Western excursion are now past, but the work accomplished at the one and the good fellowship developed on the other will live far into the future.

CIVIC AND PROVINCIAL WELCOME.

The convention hall was well filled on the afternoon of Monday, September 17th, when the members of the Association were welcomed officially by the Mayor of Winnipeg, the Premier of Manitoba, and the Chairman of the Manitoba Branch. The President, Mr. C. C. Ballantyne, was in the chair.

The President:—Mr. Mayor, the Hon. Mr. Roblin, and Mr. Drewry, I wish, on behalf of the Canadian Manufacturers' Association, to express our very great pleasure at being able to hold our thirty-fifth annual convention in the enterprising city of Winnipeg. (Applause.) It is not on the programme for me to say anything at this juncture, except to express my own pleasure, and that of the members of the Association, at being here, and I will call on the Mayor to extend to the members the official welcome from the city.

Mayor Sharpe:—Mr. President and Gentlemen of the Canadian Manufacturers' Association,—I feel, in coming before you and welcoming you to our city at the present time, that this is the most important duty I have been asked to discharge during my term of office. I regret very much that there is not someone more capable of expressing in language what I feel in my heart towards the manufacturers and your visit at the present time. Before saying any more I wish to thank, on behalf of the city council and the citizens,

the local Association for their good offices in securing your visit. I am sure the citizens of Winnipeg as a whole feel very proud of your visit to our city. I notice in the press this morning that everyone has quit work on your arrival. (Laughter.) We are going to have a holiday, but I sincerely hope it will not last too long. I know you have a good deal of business before you, and it would be entirely out of place for me to speak at length; besides, I shall have the privilege of saying a few words to you at Wednesday night's banquet. On behalf of all the citizens of Winnipeg I sincerely welcome you to our city.

The Freedom of the City.

There is no class of men in Canada that we look up to with the same amount of respect as to the manufacturers, because, next to the farmers, they are the most important class, and anything we can do to make your visit enjoyable we shall be only too glad to do. During your stay you can have the keys of the city and everything that is in it. (Laughter and cheers.) I notice that you have been good enough to bring your ladies along. If you want my services or those of the aldermen, we shall be glad to look after them. We are seriously considering in the city council what is the best way to deal with the manufacturers who are going to come to Winnipeg. We will leave no stone unturned to give them a square deal. We wish to do everything that is reasonable and possible to give them opportunity to do business in Winnipeg, or in some portion of Western Canada. While we are the most progressive city north of the American border—we may say, that ever sprang up on the American continent—yet we cannot do without your assistance. We extend to you as cordial and hearty a welcome as possible, and we hope you will enjoy yourselves during your three days in the city. We hope to have a heart-to-heart talk with you before you leave the city, and we hope your business meetings will be profitable and your stay in the city most enjoyable, and we hope to give you opportunities of seeing the city before you leave. (Cheers.)

The President:—The next speaker needs no words of mine to introduce him. I will now call on the Premier to say a few words.

The Premier's Welcome.

Hon. R. P. Roblin:—Mr. President, Ladies and Gentlemen,—I desire to emphasize what has been so ably and eloquently said by His Worship the Mayor in extending to the visitors a welcome to Winnipeg, by widening it, and making it provincial in its character. The people of the Province of Manitoba appreciate the fact that the Association have selected Winnipeg for their thirty-fifth Annual Meeting. They believe, and I believe properly so, that an occasion of this kind will do good. It will be a great advantage to them and to all the people in this Western part, and I trust will do no harm to the visitors as an Association or as individuals. (Applause.) To change the quotation slightly, I might say in these piping times of peace and prosperity there has been no discordant note or sound heard in any portions of this wide country. It has been said that there is a sort of jealousy and irritation growing up between the East and the West. As a citizen and an observing man, I have failed to discover anything that would justify anything of the kind. (Applause.) The people of Western Canada, I can assure the Association, rejoice in the success and prosperity that is enjoyed by the people in the East. I am sure I am quite correct in the statement that all the people of Eastern Canada are glad of the prosperity and expansion that is being enjoyed in Western Canada. (Applause.) Canada is a large country; it has large areas; it has large possibilities; it has large hopes and aspirations. The individual who is not true to the locality or district in which he lives, and who does not use every legitimate effort and enterprise in order to keep that particular locality to the front and, if possible, always advancing, is not doing for his district what is necessary for its development and growth. But if each man works for the best advantage of his district, every other portion of this vast Empire may well look upon what he is doing and feel the healthy impulse, which is the greatest source of strength to any people such as ours. The people of Western Canada have responsibilities resting upon them that they are endeavoring to discharge. While they give every consideration to energetically and enthusiastically discharge these duties, they do not do it for the purpose of disturbing any other portion of the country, but as patriotic citizens they wish to show Canadians in other Provinces that they are endeavoring to keep their own section and Province up to such a standard as will make it equally important in other parts of the Dominion. (Applause.)

I join with His Worship the Mayor, in extending a welcome on behalf of the Province to the ladies who have accompanied the members of the Association to Winnipeg. In this twentieth century of ours the influence of women is felt as never before, and I do not know a sphere of usefulness in which women can exercise a more beneficial and healthful influence than in sharing the responsibilities peculiar to this Western country of ours. Therefore, I am glad to have the ladies with us. Westerners do not assume to have the culture and refinement of the East—that goes with age and experience—(laughter)—but we do claim that we have as much energy and enterprise to develop and take care of the interests of the Province and this Western country as any other portion of the Dominion.

But while we may not be as æsthetic we will not yield to the Easterners in the matter of hospitality. I desire to extend the hospitality of the Province as a whole in addition to that which has been tendered by the Mayor of the city. That hospitality is as broad as our wide prairies, and there is nothing we will not do to make the visit of the Association interesting and profitable. I am sure when you have closed your session and turned your faces to the rising sun you will all say: "It was good for us to be in Winnipeg and to have held our session there." (Applause.) "It was a wise thing to have come to the Western part of our own country, and there discover for ourselves and become personally acquainted with the other widening field of opportunity along the lines of trade and commerce." I have spoken, Mr. President, I think, about three times as long as my good friend, Mr. Drewry said I should, and I hope he will forgive me. I, therefore, repeat the welcome that was so eloquently offered by His Worship on behalf of the people of this Province, and thank you for the honor you have done me in allowing me to address you to-day. (Applause.)

Mr. Drewry Introduced.

The President:—We have yet to hear from our good friend, Mr. E. L. Drewry. (Applause.) No one but those actively engaged in the work of the Canadian Manufacturers' Association knows of the enormous amount of work that Mr. Drewry has done, in order to make it possible for us to meet here under such enjoyable circumstances this afternoon. Mr. Drewry is well known throughout the length and breadth of Canada, and as one of the staunch upholders of the Association and Chairman of the Manitoba Branch, which is our most energetic Branch, I have much pleasure in calling on him to address you.

Mr. E. L. Drewry:—Mr. President, the Mayor has just, in his usual humorous and inimitable way, extended a hearty welcome on behalf of the citizens. The Premier in

his forceful eloquence has extended a wider welcome on behalf of the Province. It now becomes my duty to extend a welcome in more of a family way, perhaps like the oldest and growing son to the father, who is paying a visit. I have always, Mr. President, felt extremely proud of my connection with the C. M. A., now dating back quite a period; but I have never, sir, more fully realized the honor of that connection than I do at the present moment. I had, as the President pointed out, something to do, perhaps, in securing the meeting of the convention here. I did not do it single-handed; of course, I took my bodyguard, Capt. MacLean. At the last conference I thought it well to have a military bodyguard, and Capt. MacLean accompanied me to Quebec, and with his very able assistance we were able to secure it is only used in this country, at all events, in the geographical sense. We not only want the manufacturers of the East to come and spy out the land and realize that everything they hear about our country is not as a dream; but to see the substantial growth which is going on in the country. When you do, I venture to say that any who are here for the first time will doubtless be surprised at the growth and prosperity that they will find in Winnipeg and in the great country lying to the west of us. I do not know that I can add any more. From the bottom of my heart I welcome you here on behalf of the Branch, and anything that the Mayor or Premier has left out in the way of welcome I want to add it on behalf of the local Branch. (Applause.)



Some Winnipeg Residences, with the Manitoba Club in the lower right hand corner.

the meeting of the thirty-fifth Annual Convention in Winnipeg. I can only say, as Chairman of the local Branch, which is rapidly growing now, that we hope to be in a few years on a par with the larger Branches of Ontario and Quebec, Montreal and Toronto (which, of course, are the largest Branches the Association has). I can only add a welcome on the part of the local Branch of the Association, and say that everything that it is possible for us to do will be done to make your visit a pleasant and profitable one. I have been anxious to see the manufacturers from the East, and in using the word East, I do it in the geographical sense, because there is no east or west so far as the manufacturers are concerned. I take it that we are all brother Canadians as brother manufacturers—(applause)—but you cannot get away, Mr. President, from using the terms east and west. I know it is objectionable to some people, but

Eulogises Winnipeg.

The President:—Before calling on our First Vice-President, Mr. Cockshutt, to reply officially on behalf of the C.M.A. I want to add a word. Mr. Mayor, permit me to thank you from the bottom of my heart, and on behalf of the Association, for the warm welcome extended to us this afternoon. We from the East are very proud to come to Winnipeg, and we are proud of your beautiful streets and splendid civic management. (Applause.) It has been my good fortune for something like six or seven years to pay an annual visit to Winnipeg and the Western Provinces. Only thus can anyone from the East recognize the remarkable growth year by year. Unless one comes here and sees it with one's own eyes, it is impossible to realize what is going on daily. Therefore, Mr. Mayor, I am as delighted as you, your

Premier and Mr. Drewry are glad, that we are here. I know a number of our members are coming to Winnipeg for the first time, when they will have an opportunity of seeing your beautiful city and going west over the vast prairies and wonderful Rockies. They will come back better Canadians and as full of enthusiasm as it is possible for human beings to be. I wish also, Mr. Mayor, to say that we are not here altogether on a jaunt. As business men we appreciate the trade of the West, and if we wish to take full advantage of it, it is necessary for us manufacturers of the East to establish our factories in this city and other large cities in the West. I am especially gratified to know that the city council of Winnipeg is going to be able to give such cheap power to the manufacturers as you will be able to do in a very short time. I wish also to say very briefly that our coming here, and mingling with you, will not only be good for us, but will also be good for you, because we will be



Mr. Lloyd Harris
Ontario Vice-President

better acquainted with one another, and there will be no such thing as a line between the East and the West, and we will all be working for the unity and the upbuilding of the Dominion of Canada. (Applause.) Mr. Premier, I heartily concur with what you say, that there is no sentiment that I have ever heard of, either ill-feeling or jealousy, between the East and West, and I am quite sure it will never be. This Dominion is too vast, and Canadians are too loyal and proud of Canada, to allow anything to bar or impede the consolidation of our distant Provinces into one united whole for continued advancement. As Mr. Cockshutt is going to reply, I cannot speak any longer, except, Mr. Mayor, to thank you, and you, Mr. Premier, and you, Mr. Drewry, and I know we shall enjoy our visit here. I shall now call on Mr. Cockshutt, our First Vice-President, to say a word.

Returns Thanks on Benalf of the Association.

Mr. Cockshutt:—Our President has asked me to thank you on behalf of the C. M. A. for your kindly welcome. We fully appreciate your greeting, and heartily reciprocate your generous words. A good number of us who are here this afternoon remember with pleasure our last excursion of three years ago, and our pleasant stop-over with you at that time in this expanding and prosperous city of Winnipeg, which, since our last visit, has gone steadily forward, increasing in wealth and prosperity at a greater ratio, I believe, than any other city on this continent. That, in itself, speaks volumes for your energy and enterprise. The C. M. A. are here on business, to discuss in Annual Convention general subjects of interest to all Canadian manufacturers; to hear reports of the year's standing committees; to transact any general business that may come before the Association; and to elect officers for the ensuing year. We decided to come here to do our Convention work, because, at our last meeting in the city of Quebec, we were urged strongly by an official invitation, backed up by our Manitoba Vice-President. The Canadian manufacturers are a united body, associated together for the purpose of advancing the industrial life of the country. Our industries, as you know, give employment to hundreds of thousands of workers, who pay out annually, in wages alone, more than $114,000,000. The members of our Association are honest men; as children we were trained by Christian parents, and were early taught " the right from the wrong." I give you this information gratuitously and personally, because some of you may have gained the impression by "deep" reading (I say "deep" reading) and languid thinking (letting others think for you) that no man can be a manufacturer in this country and not take more than rightfully belongs to him. However, we are here, and any of you who are afraid of us, please apply for "Protection" to the proper authorities. Now, Mr. Chairman, I have been told, or read, that "it is good policy to leave a few things unsaid, and if I am to follow that advice I must close my remarks; otherwise, I might let fall some words of wisdom that would be too weighty for me to gather up, and the Press might seize upon those words, and to-morrow I might find that I had become great in their editorial columns and small in the estimation of the members of the C. M. A. Let me again emphasize, at the risk of repeating myself, that we are deeply grateful to you for all your kindnesses. We hope during the next few days to meet many of you, and when we leave and pass out to the Western plains we hope to renew there, again, old friendships made upon our last journey to the Pacific, which many of us remember with much pleasure. I feel sure that we shall all, again, appreciate our trip, and I sincerely hope carry home with us your good-will. We, without doubt, will carry back with us the most pleasant recollections of a great and successful Convention, and a delightful holiday with our fellow-countrymen of the West. We are delighted to be with you, and for the C. M. A., sir, I extend to you, as the representative citizen of Manitoba, and to you, sir, the representative of Winnipeg, and to Mr. Drewry, our own Mr. Drewry, most grateful thanks for your hospitable greeting and kindly words. (Applause.)

The reception proceedings were concluded by the calling for three cheers for the Mayor of Winnipeg, three cheers for the Premier, and three cheers for Mr. Drewry. The whole company joined in singing, "For He's a Jolly Good Fellow."

The President's Address.

The President: Gentlemen of the Canadian Manufacturers' Association,—It is always necessary for a retiring President to make a retiring address. My annual address will not be very long, and with your kind permission I shall read it to you now.

THE ANNUAL ADDRESS OF THE PRESIDENT

Canada's Commercial Position Ably Discussed by Mr. Ballantyne.

Gentlemen of the Canadian Manufacturers' Association:

When our good friend, Mr. Drewry, at our Quebec Convention, extended an invitation to the Canadian Manufacturers' Association to meet this year in Winnipeg, there was no dissenting voice. Perhaps the invitation was accepted so unanimously because of Mr. Drewry's oratory, or perhaps it was the pressing messages he brought from the Manitoba Branch of the Manufacturers' Association, His Worship the Mayor of your city, the Board of Trade, and the Builders' Exchange; or again it may have been the inducements held out by the Canadian Northern for a trip to Edmonton, or by the Canadian Pacific to occupy their fine new hotel. No matter what the reasons, the members of the Association were deeply grateful, and I think the large number who have travelled two, three and four days to be with you, is sufficient evidence of their appreciation. My own opinion is that the impression is firmly installed in every one of us that Winnipeg has already reached the threshold of greatness, and that this whole western part of our country is advancing by such momentous strides, that we have to see for ourselves before we can understand, and we are here to see.



Mr. C. C. Ballantyne
President, Canadian Manufacturers Association, 1905-1906

National Development.

The growth of your city is marvellous, the extent of your business transactions amazing, but on every side we are given the assurance that this wonderful development has but begun. We, your fellow-countrymen, wish you all success. You cannot be prosperous without permitting us to share in your prosperity. Our country has become so immense, our prosperity has made us so contented, our aspirations have so steadily developed along national rather than provincial lines, that we have assumed the task of working together for the good of our vast heritage, with nothing on the horizon to interfere with a continuance of united and successful advancement.

Trade Figures.

It is a great privilege to look back over Canada's activities during the past year and see on every hand evidences of comfort on the part of our people and the prosperity of our business institutions.

Canada's foreign trade has shown a remarkable increase. The total trade is $73,046,000 in excess of 1904-05, and our exports have increased $53,270,000, or in round figures, $20,000,000 more than our imports. The imports from the United States show another increase. This year they reached $180,729,000, or an increase of 8 per cent. over the previous year. A gratifying feature of our trade is that the imports of British goods have increased more proportionately than imports from the United States. The increase is 13 per cent.; the total imports, $69,298,000. There is no doubt that a large proportion of this increase is as a direct result of the preferential tariff. The value of the exports of agriculture and animals and their products was $120,518,000, an increase of $30,197,000 over 1905. Manufactured goods have increased from $21,191,000 to $24,561,000, showing a gain of about 16 per cent.

Opportunities for Canadians at Home.

The growth of this country is so rapid that we must guard against the possibility of becoming engrossed with the enormous work of to-day, without placing a proper estimate upon the future.

Agriculture is the corner-stone of Canadian Industry. All our Provinces are more or less agricultural. With the development of our farms, we have built railways, established banks, and opened trading houses, all of which are most necessary. We thought at one time that certain of our Eastern provinces were destined to be chiefly agricultural provinces. We improved the land and grew larger and better crops year by year. This was all well and good.

After a few years we discovered that we were lacking in big cities, in consuming centres; we discovered that our sons and daughters born on the farm would not all be farmers, some would not because of their temperament, others would not because they saw greater opportunities elsewhere. The result was that Canadians went South by the thousand. Most of them went to the cities, not the farms; to where there were factories; they had seen enough of the fields. This continued for a number of years. In 1900 there were 1,180,000 persons of Canadian birth living in the United States. I feel safe in saying that the most of these Canadians were lost to our country because we had not the towns or the factories—in other words the inducements and the opportunities.

To-day the situation is completely changed. We have begun to study our own resources. What do we find? Not only that nature had fitted us to be a great agricultural nation, but that our mines, our forests, our streams, and our waterfalls destine us to stand in the front rank of the manufacturing countries of the world; that here, within our own

borders, we have all the raw materials for the world's great industries, the necessary industrial opportunities for all our sons and daughters, and the greatest and best market for the products of our farms. Our neighbors to the South have recognized this even sooner than we ourselves. To-day they are returning to us our own.

It is for us to say whether we will continue to purchase our manufactured goods in the United States, or put just a little more tariff on certain lines, and make the factories in the States build plants in Winnipeg, Saskatoon, Moose Jaw, Calgary, Medicine Hat, Regina, Edmonton or any other of the many centres in our great Western prairies which have advantages to offer, and by this means keep the population we are getting. Last year our dutiable imports from the United States amounted to $94,200,167, the large percentage of which was manufactured goods, and might just as well have been made in Canada. As it is the United States farmers, workmen, manufacturers and other citizens, have just that much of our money that should have been kept at home.



An Historic Spot in Winnipeg.—The Entrance to Old Fort Garry.

Canada's Opportunity.

It is only within the last decade that we have begun to properly appreciate our rich resources, but now we are all full of confidence in the future of our vast Dominion, and the outside world is beginning to learn what great opportunities we have to offer. Sir Wilfrid Laurier's striking phrase, "Canada is the country of the twentieth century," has gained wide currency because it gives apt expression to the growing belief that no other country contains such great resources of natural wealth ready to be developed. It is very important, then, for us to adopt a policy that will assure to our own people, to those who settle in the country and thoroughly identify themselves with its interests, the full benefit of this coming development. Many millions of dollars will be realized annually from the crops produced in our rich soil, many millions more will be taken from our forests and our mines. Shall this wealth remain in the country, shall the money which represents it circulate in the Dominion for the benefit of the people who develop these resources, or shall we by a mistaken fiscal policy allow it to go abroad for the enrichment of other nations? The future of Canada largely depends upon the way our statesmen decide.

Canadian Tariff Attitude.

It must be a matter of gratification to all patriotic Canadians that the fiscal policy has ceased to be a matter of partisan controversy. The leading politicians of both political parties now recognize the necessity of protecting Canadian industries of all kinds, and we may hope that when the members of our Dominion Parliament are called together in November to consider the revision of the tariff they will set aside all old prejudices and look at the question from the broad standpoint of Canadian interests, that they will consider what policy will best develop the varied resources of our country, give profitable employment to all classes of our people, and maintain and advance the prosperity that now exists.

Imperial Preference.

When a number of members of the Canadian Manufacturers' Association visited the United Kingdom last year the leaders of the party took pains to make our position regarding the question of a Preferential Tariff clear to the British people. We told the merchants and manufacturers of the United Kingdom that it was our ambition to make in Canada everything which we could advantageously produce and that, while we did not desire a prohibitive tariff against Great Britain, we would insist upon sufficient protection to at least put our Canadian manufacturers on an equivalent footing with those of Great Britain, but that we were anxious to divert into British channels, so far as possible, the trade we now did with foreign countries. In other words,—that when we must go abroad to buy goods we would prefer to buy them from our fellow-citizens of the British Empire. The leaders of the tariff reform movement in England expressed approval of our attitude, and I am glad to be able to say that when the Chambers of Commerce of the Empire assembled in London in July of this year a resolution in favor of mutual preference within the Empire, moved on behalf of the Canadian Manufacturers' Association and the Boards of Trade throughout the Dominion by our ex-President, Mr. Geo. E. Drummond, was carried by a vote of 104 in favor to 41 against. This is very significant when it is known that Mr. Drummond was very explicit in his statement of the Canadian attitude in the speech which he made in moving the resolution.

The true preferential policy has been aptly expressed by two little stamps, one of which bears the words, "Keep your money in circulation at home by buying goods made in Canada," while the other says, "When you can't get what you want at home buy within the British Empire."

An Equalizing Tariff.

We are sometimes asked what we mean when we say Canadian manufacturers do not demand a prohibitive tariff against the United Kingdom, but that we must at least have sufficient protection to put our Canadian manufacturers on an equivalent footing with those of Great Britain. Perhaps our meaning may be better understood when I cite the case of one of the members of our Association who had large factories in Montreal and London, England. The difference in the wages paid in these two great factories of England and Canada is remarkable. Figures taken from the pay-rolls, and strictly accurate, show that:

Common labor is 82 per cent. higher in Canada than in England.

Gang leader or sub-foreman, 70 per cent. higher.
Boys (16 to 18), 85 per cent. higher.
Machinists, 64 per cent. higher.
Carpenters, 40 per cent. higher.
Girls (by the hour), 33⅓ per cent. higher, and
Girls (piece-work), 66⅔ per cent. higher.

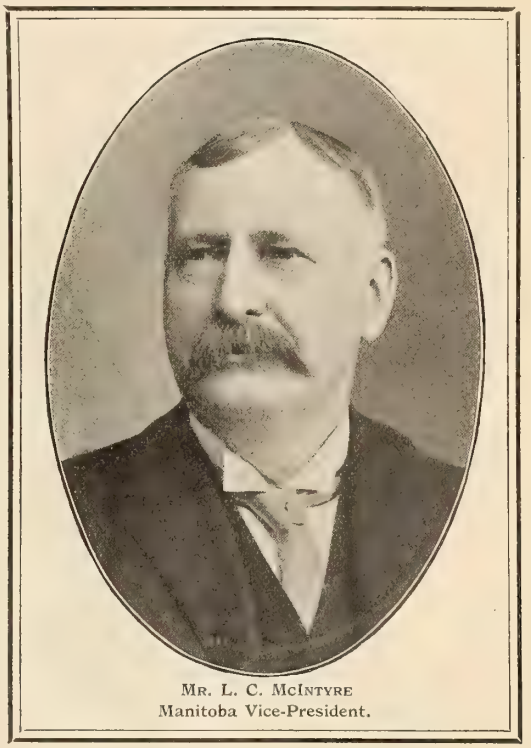
Are not these figures alone sufficient to show the necessity of maintaining an equalizing tariff against British

goods? But if, while giving our manufacturers fair play in competition with British manufacturers, we make our tariff so high against all foreign countries that our surplus requirements, above what our own factories can supply, will be obtained from British manufacturers, a vast amount of money which now goes to enrich foreign nations will be turned into the pockets of British manufacturers and their workingmen.

The Value of Foreign Trade.

During the past eight or nine years the world at large has been enjoying a period of extraordinary prosperity. Never before was business so generally good throughout all civilized countries, and Canada has been getting its share of the good times. Indeed, the country has been so prosperous that many of our people have failed to see the necessity of providing for future years when the world's commerce may pass through a period of stagnation, as it has so often done in the past after periods of great activity and general prosperity. They have failed to see that, by sending abroad annually many millions of dollars for manufactured goods which could be made just as well in Canada, we are draining the country of wealth which will be sorely needed when the bad years come. We all take a certain pride in big trade figures. For the fiscal year ending June 30th, 1906, Canada's trade with the world at large amounted to $552,000,000, an increase of over eighty millions over the previous year. Ten years ago it was only a little over $239,000,000. Canada per head of population has a greater commerce with the outside world than the United States, but we should not be too ready to congratulate ourselves on this fact. A writer on this subject has pointed out that if the Americans would buy all the iron and steel and all the cotton now manufactured in the United States the figures of foreign trade would be enormously increased. If the raw cotton and the iron ore used in American mills and furnaces were shipped abroad to be used in the cotton mills and blast furnaces of Germany and Britain the total exports of these raw materials would bulk largely in the trade returns, and when the finished products were brought back to the United States they would swell the figures of imports. Yet no one will argue that it would be better for the people of the United States to close their cotton factories and shut down their iron and steel works, in order to thus increase the foreign trade per head of population. If the United States manufacturer was not permitted to dispose of his wares quite so easily in Canada, our foreign rade pose of his wares quite so great, but our home trade could be very greatly increased. During the fiscal year ending June 30th, 1905, imports from the United States for consumption in Canada, exclusive of gold and silver, amounted in value to $152,431,626, while Canadian exports to the United States, exclusive of gold and silver, amounted to only $53,498,642. We hope that the tariff which the Government will bring down at the coming session of Parliament will effectually prevent future annual importations from the United States amounting to three times the value of our exports to the United States. The Canadian West is getting thousands of American farmers as settlers every year. Why not, by means of our tariff, invite American manufacturers to follow them in and build factories in the towns of Manitoba, Alberta and Saskatchewan? I am convinced that the great majority of Canadians in the great West would approve of a policy that would bring this about. Why should the Canadian farmer be regarded as antagonistic to a policy which would develop the great Canadian West? Is it not much more reasonable to assume that his ambitions are identical with the ambitions of the farmers in the Western United States? These farmers declared for a policy of all-round protection, and they got it. Now there are hundreds of manufacturing and consuming centres throughout the great West, and Western farmers have markets at their doors for their enormous harvests. I read in the Winnipeg "Free Press" of December 16th, 1905, a memorial presented to the Dominion Tariff Commission by the Board of Trade of the town of Medicine Hat. This memorial says:

"The demand for manufactured goods throughout the North-West is already very large, and is increasing every year in an amazing way. We think, therefore, that if the Canadian tariff were made high enough to shut out the American goods that flood this country, many of the manufacturers of the United States would start branch factories in Medicine Hat. In asking for a high tariff against the United States we are not moved by any feeling of hostility to that country. Many of our best settlers come from the United States, but they come here to better their condition because land is cheap in a new country, and they will be glad to have a home market near at hand such as will be created by the establishment of manufacturing industries in the Canadian



Mr. L. C. McIntyre
Manitoba Vice-President.

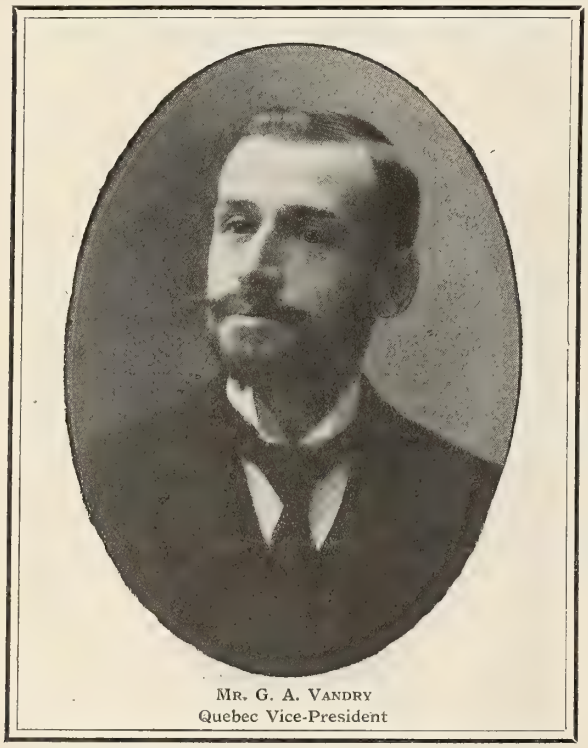
North-West. We think that the American settlers generally will be pleased to see the tariff raised as high as that of the United States, because they know that the development of the United States has been greatly assisted by high protection, and they naturally desire the country in which they have settled to grow and prosper."

Medicine Hat is only one of the towns in the West which would secure factories if the tariff were raised. It would be difficult to exaggerate the possibilities of Winnipeg as a manufacturing centre when cheap electric power is brought here from the rapids of the Winnipeg River. This enterprising and ambitious city, with its splendid geographcal situation at the gateway of the Canadian West and its unrivalled railway facilities, will not be content to be simply a distributor of foreign goods to the people of the West. It can never attain the importance to which its geographical situation and the enterprise of its people entitle it, unless the factories are as numerous as the warehouses. I believe that in the very near future the great bulk, if not all, of the manufactured goods that are required in these Western Provinces will be manufactured in Winnipeg.

Some of our members who are large manufacturers in the East are building branch factories here now, and a great many more are contemplating doing so. If manufacturers wish to take full advantage of the growing trade in the West, it will be necessary for them to establish branch factories in Winnipeg and the other enterprising Western centres.

To accomplish this we want a strong Canadian policy that will benefit both East and West. What action the Government will take at the coming session of Parliament we cannot say, but we believe that the Government will give us the best and strongest Canadian tariff that we have ever had, and one that will give thorough protection to every Canadian industry.

At our last annual banquet, held in Quebec, the Right Honorable Sir Wilfrid Laurier, in the course of his eloquent and patriotic speech, made this striking announcement, when referring to the coming revision of the tariff. After the Premier had referred to these great Western Provinces as



MR. G. A. VANDRY
Quebec Vice-President

being the "Garden of Canada" and to their great future, he went on to state that he hoped before long, with our great farming population, which is increasing rapidly each year, that every shoe that would be worn in these prairies would be a Canadian shoe, that every yard of cloth marketed there would be a yard of cloth produced in Canada, and so on and so on.

This is the policy of our worthy Prime Minister; this is the policy of the Canadian Manufacturers' Association, and it is the policy that the people of Canada demand to-day. "Made in Canada" is popular, and this Association has done its share in bringing this happy state of affairs about. The manufacturers of Canada will admit that twenty-five or thirty years ago their products may not have been equal to the manufactured products of older and more experienced nations, but that is not so to-day—"Made in Canada" products are equal to the best in the world, and this strong, patriotic desire on the part of all to demand goods that are "made in Canada" is one of the most promising features for the further development of this great country. Remember, that every workman employed in the factories of Winnipeg and other Western cities will eat food grown by the farmers of Manitoba, Saskatchewan and Alberta, and thus the farmers of the West are as much interested in the growth and prosperity of the cities as the townsmen themselves.

Protection for the Farmers.

But the value of home manufactures to our farmers depends to a considerable extent upon the measure of protection which they receive for their own products. If farm products from the United States can come in free of duty or on payment of very low duties, the farmers of Canada, whether in the West or the East, will not be receiving fair treatment. They cannot sell their products in the United States owing to the high tariff of that country, and in the coming revision of the tariff our Government should see that they are not subjected in their own home market to unfair competition from farm products grown in the United States. For instance, let us compare the tariffs of Canada and the United States on butter, cheese, eggs and bacon, which are as follows:

	United States Tariff.	Canadian Tariff.
Butter	6c. per lb.	4c. per lb.
Cheese	6c. per lb.	3c. per lb.
Eggs	5c. per doz.	3c. per doz.
Bacon	5c. per lb.	2c. per lb.

A great deal has been said about the United States being the natural market for Canadian farm products, yet per head of population the Americans bought only a little over 9 cents worth of Canadian farm products during the year 1904, while Canadians per head of population bought from the United States over $3.15 worth of the same kind of farm products.

One Canadian consumed more United States farm products than thirty-four Americans did Canadian.

There is no reason for this extraordinary difference, other than the fact that the United States has a high protective tariff, while Canada has a low one.

Canadians bought from the United States, in the fiscal year 1904, 540 times as much **bacon,** thirteen times as much **butter,** five times as much **cheese,** and over thirty times as many **eggs** as we sold to them—this notwithstanding the fact that they have a consuming market fifteen times as large as ours.

Let me cite another article of great importance to the farmer of the West, which has not been produced to any great extent, owing to its being on the free list. I refer to flaxseed. No country in the world is as well adapted for producing flaxseed as the Canadian North-west, yet, according to trade and navigation returns, a little over a half million bushels were produced in Manitoba and North-west Territories during the last fiscal year, whereas the United States farmer produced 29,000,000 bushels.

Our flaxseed is shut out of the American market on account of a duty of 25 cents per bushel. Why do not our Canadian farmers ask our Government to place a duty on flax grown in Canada to give them the home market which they are justly entitled to? There is from a million and a half to two million bushels of flaxseed consumed in Canada annually by our Canadian linseed oil crushers, and why should a million bushels or more of foreign seed be used instead of buying "Grown in Canada" flaxseed, and grown right here in the West, the best that can be produced?

I wish to point out to the intelligent farmers of the West that the American farmers find flax more profitable to grow than wheat, and I hope that, when revision of the tariff takes place, there will be a duty placed on flaxseed for the benefit

of the farmer and that all flaxseed used in Canada will be "Grown in Canada."

These figures are not very encouraging for those Canadians who believe that the United States is the natural market for Canadian farmers. Will anyone argue that Canadian farmers cannot produce enough butter, cheese and eggs, to supply the Canadian people, and that these importations from the United States are necessary? Why not shut them out by increasing the protection?

The Western Provinces of Canada will derive as much benefit from protection as the Eastern Provinces. According to the last United States census there were in the United States a total of 225,287 manufacturing establishments with an aggregate capital of $3,477,587,249 and an annual product of $5,252,311,029. In New England there were only one-quarter as many manufacturing establishments as in the West, less than half the capital invested, and an annual production of less than two-fifths that of the West. And yet there was a time when the free traders of the United States asked the farmers of the West to vote against protection as a policy intended to benefit the New England States at the expense of the West, which, they said, could never be a manufacturing country. Will any citizen of Winnipeg say that the Canadian West is so inferior to the American West that it cannot also become a great manufacturing country?



Scene on the Red River, Winnipeg

One reason why it is particularly important that the tariff protection should be increased without delay is the fact that if foreign materials are used on the Grand Trunk Pacific and other great railways that are now in the course of construction the money will go out of the country, whereas if Canadian materials are used the money will be kept in the country, circulating to and fro, being paid out again and again, and benefiting every class of the community. The Government's action in placing a high protective duty on steel rails has already been justified by results. It has created a great Canadian industry that will in time reach immense proportions. If the same principle is applied to every line of industry, the effect will be the transfer from foreign countries to Canada of an immense amount of capital for the establishment of great manufacturing industries, which will give employment to many thousands of workmen, who will eat food grown on the farms of Canada.

Provincial Taxation.

One point—and it is a serious one—I would bring to your attention in passing.

It seems to be the growing tendency of several of the Provinces of our Dominion to pass laws which in their practical effect discriminate against the business establishments in other parts of the country. It is a deplorable fact that many of our provincial legislators have so forgotten the great Confederation idea of unity that they have been only too ready to devise means to add to their local revenue by taxation directed at the business people of other Provinces, thereby imposing unnatural restrictions upon inter-provincial trade. The situation in this respect has grown rapidly from bad to worse in the last year or two, until one begins to wonder just how far the Provinces will go before they will be obliged to call a halt.

Is it reasonable, I ask, that the free flow of trade from one district to another should be impeded by such barriers as commercial travellers' taxes and commercial corporation registration fees? For the small revenue that these taxes produce is it worth while to complicate the business dealings between Province and Province, not to speak of the large special staff of public officials required to enforce the laws and collect the taxes?

As manufacturers we have good reason to object when we cannot send our travellers or our goods into other Provinces without filing statements, making deposits, and paying special taxes and registration fees, the amount of which varies in Quebec, Ontario, Nova Scotia, British Columbia and Prince Edward Island. Surely our Canada, of which we are so proud, is too great and too progressive to tolerate this short-sighted policy!

I firmly believe that steps should be taken to harmonize the trade legislation in the different parts of the country and make an end of the senseless discrimination of one Province against another.

Water Transportation.

The great development of our foreign commerce naturally leads us to the consideration of Canada's water transportation facilities. This great West, although far removed from our ocean ports, is nevertheless vitally interested in improvements to steamship lines, and the many routes, rivers and harbors, of our great country. To get the best price for our products, whether of the farm or factory, we must have easy access to the world's markets. As a signal improvement we welcomed, a year ago, the new Allan turbines, and this year we point with pride to the two grand Empress boats put into commission by the C.P.R. The service from Canada to Great Britain is now just as comfortable and fast as from New York.

Another great improvement has been made by our great national transportation company, the C.P.R., of which we are

all so justly proud, and that is that the mails are now carried from London to Hong Kong and from Hong Kong to London in twenty-nine days by the inauguration of the over-seas special mail train connecting with the magnificent Empress boats on the Atlantic and the Pacific. The building of a second great transcontinental road—the Grand Trunk Pacific—and the extension of the Canadian Northern, which we hope before long will make a third transcontinental line, together with double tracking of the C.P.R. line from Winnipeg to Port Arthur, and increasing the fleet on the Upper Lakes, and the vast improvements the Dominion Government have made by deepening the channel and improving the waterways in the St. Lawrence, transportation facilities are being rapidly improved, not only for the benefit of the West, but of the country as a whole.

Notwithstanding the great progress we are making, there were, during the fiscal year 1906, 2,600,000 more bushels of Canadian wheat shipped by United States ports than by Canadian ports. This shows that improvements in our shipping is a national question. We hope that, with the great improvements that are being made in water and rail transportation from the West, it will soon be a matter of past



Mr. T. M. Cutler
(Acadia Sugar Refining Company)
Nova Scotia Vice-President

history for this country to send any of their wheat abroad via American ports, but instead every bushel will be shipped by our own great national routes via Canadian ports. The Government is each year spending more money to improve our harbors and rivers. The improvements which have been introduced to buoy and light ocean channels are most important, but the development does not keep pace with the growth of the country. As Canadians we should encourage the Government in the work it is doing and at the same time give our assurance that all efforts and wise expenditure to make our waterways safe and attractive will meet with favor.

The Work of the Association.

It is a pleasure to refer briefly to the work of the Association. We have had another highly successful year. The Association finances were never in so satisfactory a state. The membership has shown a splendid increase, and the interest taken in the work by the general membership is very gratifying. The Branches have all held successful Annual Meetings, and while, in some of the smaller Branches, there has not been as much activity as we would have liked, yet on the other hand some most important work has been accomplished. Some of the trade sections have been particularly active. I would like to refer especially to the Gold and Silversmiths' Section, which has been successful in securing a Dominion Act to regulate the stamping of gold and silver articles, and which gives a protection to both the manufacturer and consumer by forbidding the sale of fraudulently marked goods. We welcome two new sections, Pulp and Paper, and Furniture. The membership of each of these is large, and they have already started on effective work.

The Association was well represented at the Congress of Chambers of Commerce held in London in June. The most important resolution considered, that of preferential tariffs, was introduced by the chairman of the delegates from the Association, Mr. George E. Drummond. Resolutions advanced by the Association, relating to uniform laws governing Patents, Copyright and Insolvency and a uniform system of Weights and Measures and Currency for the Empire, were adopted.

We learned with pleasure that Japan has accorded to Canada the favored nation tariff treatment, and in some articles the reduction of duty is quite important. The Association has been endeavoring to have this arrangement effected for the last three years, and it is hoped the members of the Association will second the successful efforts of the Government by giving more attention to the Japanese market.

It is very gratifying for my year of office to be marked by the absence of effort on the part of organized labor to secure unfair privileges from our Ottawa Government. I hope that the unions will continue this policy. For the most part conditions between employer and employee are satisfactory, and the unions and this and other associations of employers should seriously consider the results that ill-advised attempts to advance legislation would have.

Probably the greatest need of manufacturers at the present time is skilled help. The Association has not hesitated to express its disapproval of the emigration policy of the Dominion, which discourages skilled mechanics from coming to Canada. In addition to this the Alien Labor Law is designed to prevent manufacturers from bringing such men to Canada; and further, no steps are being taken to train such men at home. The Technical Education Committee presented a memorial to the Dominion Government, asking for the appointment of a commission for the purpose of indicating a national system of technical training. This is greatly needed in Canada, and if we are to keep pace with the United States and European countries we must give our people every opportunity to attain skill.

Insurance.

The report of the Insurance Committee will be found to be worthy of the closest attention. It records a successful year's operations, and clearly establishes its value in the Association's extended ramifications.

The investigations conducted by this committee throughout the year into the cost of fire insurance protection, is of the utmost importance, and their suggestions that in mutual fire insurance there is to be found economy and safety are appealing with force and power to our members.

During the year the committee has reported fully to the Executive Council the conclusions they have reached in this matter, and I am safe in saying that in no case has a recommendation been made without a most exhaustive investigation and full and careful consideration. As a result there is now filed in the Insurance Department records of great value; they are open to inspection at any time, and the more carefully they are studied the more clear and convincing will

be the conclusion that a remedy for existing evils and burdensome rates is to be found in a well-organized system of mutual insurance of and by the manufacturers of Canada, just as the success of the same principle has been demonstrated beyond the slightest doubt by the manufacturers of the United States.

Once again the insurance companies forming the Canadian Fire Underwriters' Association have turned a deaf ear to our overtures for a conference. It is quite evident they prefer to remain entrenched behind their powerful organization, undisturbed by thought of injustice or oppression, but companies successful because of their specialization are entering the Canadian field and some measure of relief may be looked for. In this way, and with liberal support to the companies that are being formed, it may be confidently expected that the burden of the insurance tax may be somewhat alleviated.

Railway and Transportation.

The value to our organization of an expert in transportation matters has been emphasized more during the past year than ever before, and I know that the report of the Department will bear testimony to this fact.

It is gratifying to note that an increasing number of members are taking advantage of the services of the Department, and consequently its usefulness has enhanced.

The Association has continued the policy originally laid down, of working in harmony with the transportation companies, and, while it has been necessary to refer certain questions to the Railway Commission, I am glad to say that the relations existing between the railways and the Department are of a satisfactory character.

Three outstanding transportation problems, which have been before us for some years, have been finally submitted to the Railway Commission. I refer to the freight classification rules, transcontinental rates and the discrimination existing in the Eastern Provinces in favor of the United States. The first mentioned was finally satisfactorily adjusted by conferences with the railways. The transcontinental rate question has been ruled on by the Commission, and, while some of the claims of the Department are upheld, the discrimination has not been removed. The adjustment of the discrimination in favor of the United States in the Eastern Provinces is now pending.

The members of our Association must be gratified to note that the Government has taken action along the lines of the resolutions passed at the Quebec Convention, by bringing express companies under the Railway Act and making more adequate provision for the interchange of traffic between railways.

For the highly satisfactory condition of affairs throughout the Association I wish to take this opportunity of stating that it is largely due to the loyal assistance and hearty co-operation that have been extended to me at all times by the members of our general Executive Council, our various Committees and our Branches. A few months after I assumed the high office which you were good enough to call me to it was my personal loss, as well as that of the Association, to lose the services of our General Secretary, Mr. Younge. Mr. Younge resigned to accept a position with one of the largest manufacturing concerns in Montreal, and it is gratifying to us all to know that he is succeeding so well.

Our organization, however, is a strong one, and when one good man drops out there is always another equally as good to take his place. Mr. J. F. M. Stewart, our present able General Secretary, was unanimously chosen to succeed Mr. Younge. I cannot speak too highly of Mr. Stewart's good work, and it is a pleasure for me to extend not only my personal thanks, but those of the Association, to him for his splendid work and his very able assistance. Once again we return our hearty thanks to our good friend, Mr. Booth, and we congratulate him upon the very satisfactory state of our finances. I wish also to thank the managers of our Insurance, Transportation and INDUSTRIAL CANADA Departments. The very satisfactory reports to be presented to the Convention will deal largely with the results of the efforts of these men. I am sure that they will receive your hearty approval.

It is only possible to refer to a few of the important features of the Association's work. On every hand there is marked activity and increased usefulness, and I have to thank you, gentlemen and members of the Canadian Manufacturers' Association, for your active co-operation and assistance, which you have given me during my term of office, and which I am expecting during the continuance of this Convention. It is, indeed, a privilege to be connected with a great national Association like ours, and I know that when laying down the cares of this honorable office they will



MR. F. L. HASZARD
(Charlottetown Condensed Milk Company)
Prince Edward Island Vice-President

be taken up by a worthy successor, and that under his able guidance and with your continued assistance our Association is bound to grow still larger and greater.

I earnestly ask all manufacturers in Canada to-day, who are not as yet members of this great national organization, to become such. Membership in our Association means sharing in the great opportunities of helping to still further develop and build up this great country of ours, and by so doing participate and share in the further upbuilding and consolidation of the great British Empire to which we are so proud to belong.

In conclusion, may I say one work with regard to the great future which awaits us:

It seems but yesterday that we were a comparatively unknown people; to-day the name of Canada is on the lips of every country in the world, and thousands are hurrying to our shores to find new homes on our great prairies or in our busy towns and cities.

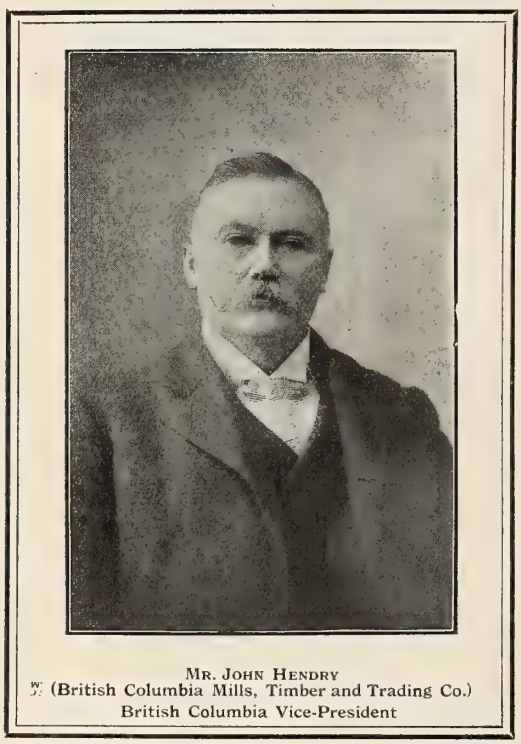
We are gathered to-day at the gateway of the greatest wheat-producing area in the world. West of us 171,000,000 acres of arable farm lands are waiting for the plough. Of this immense territory only about 4 per cent. is as yet under

cultivation. If we cultivate only one-quarter of it our granaries will contain more than four times the requirements of Great Britain, the world's greatest market.

Resources of every kind are at our hand. The mines, the forests, the seas, the farms and factories of Canada, are all beckoning labor and enterprise from every part of the globe, offering not only healthy conditions and comfortable homes, but a citizenship which, in the freedom of its thought and institutions, is as broad and free as our great dominions themselves.

Great as these resources are, they are all enhanced by our splendid position in the Empire and the world of commerce. Nature has destined us to be a great producing country. Let us not forget that we possess the shortest routes to Great Britain on the east and the Orient on the west. We lie between the East and the West. We hold the strategic position in time of war, and we will hold the commercial supremacy in times of peace.

In the great Imperial preferential movement to which



MR. JOHN HENDRY
(British Columbia Mills, Timber and Trading Co.)
British Columbia Vice-President

we are moving on, and in the commerce of the world, Canada must play an important part, and the life of this great Association must be woven into her development from year to year.

What a great task; what splendid opportunities! To develop all our industries hand in hand, to cultivate and maintain a national co-operation between our now scattered Provinces, to weld and strengthen the bonds which bind us to the other portions of the Empire, and all the while to keep pure and healthful our moral and political life.

If we are faithful to the trust imposed in us we need have no fear of the future.

Mr. W. K. George, addressing Mr. Cockshutt, Vice-President: I would ask you to consider yourself chairman while I move, seconded by Mr. Deacon, of the Manitoba Iron Works, a sincere and hearty vote of thanks to our President for his able, patriotic, Canadian address, and I should like to bear testimony to the splendid work our President has done for the Association in so unselfish a manner. No one had a better opportunity of judging that than myself. When I was honored with the position of President, I was honored at the same time with having as my Vice-President the man whom we all honor and appreciate, and who honors us by the way he has filled the position of President of the Association. I move a hearty vote of thanks to Mr. Ballantyne for the splendid address he has just delivered to us.

Mr. T. R. Deacon:—If the address has not been printed, I think it should have been, and distributed at this stage of the meeting. There is so much food for consideration and so many matters suggested that ought to have been dealt with at this meeting, that it seems to me that it could not be distributed too soon. I have great pleasure in seconding the motion.

Mr. Cockshutt:—The address will appear in to-morrow's papers, and you will be able to procure it, and it will be published in INDUSTRIAL CANADA. I wish to add my own testimony as regards our President, who has held the office throughout the year. I have had the good fortune of being the Vice-President, and with such a President as he has been, my duties have been extremely light, and I can assure you he has worked at all times in the interests of the Association.

Addressing Mr. Ballantyne, Mr. Cockshutt continued: Mr. President, I have much pleasure in tendering to you the thanks of the Association.

Mr. Ballantyne:—Mr. Vice-Chairman, Mr. George, Mr. Deacon and Gentlemen,—I appreciate more than I can express at this time your very kind vote of thanks. I think you are rather too generous, because my address was not as strong as it might have been, but still I am gratified it has met with your approval. I shall only thank you again. We shall now proceed with the business before us this afternoon.

The Secretary called attention to the courtesies offered by the telegraph companies and Bell Telephone Co. in the free use of telegrams and telephone messages during the Conference; also, to the privileges extended by the Manitoba and Commercial Clubs to all delegates during the week; also to the Winnipeg Industrial Bureau in Room 105, where information with reference to local matters connected with manufacturing was obtainable. As it was now ten minutes past four, the Chairman stated that further business would not be proceeded with, but he asked all delegates to attend promptly at 9.30 next morning to proceed with the agenda of the Conference. The meeting was then adjourned.

THE CIVIC RECEPTION.

In the evening the visitors were the guests of the city at a reception in the Royal Alexandra. The parlors and reception-room of the hotel revealed a brilliant scene at the first social event of the Convention. The guests were received by Mayor Sharpe and Mrs. Sharpe, Ald. and Mrs. Cox, Ald. and Mrs. Finklestein, Ald. and Mrs. Latimer, Ald. and Mrs. Davidson, Ald. and Mrs. Pulford, and Ald. and Miss Sandison. The beautiful corridor, luxuriant with draperies and spreading palms, led to parlors whose decorations were a choice harmony. In the breakfast-room a programme of exceptional excellence was provided as follows:

Violin solo—"Fantasia Appasionata".....Bientemps.
Miss Lawson, London, Eng.
(Encore: Symphony.)
Song—"There's a Land".....Mr. Warrington.
(Encore: "May.")
Canadian Nature Sketch.....Miss Edna Sutherland.
(Encore: Selection from Barrie.)
Song—"There'll Never be One Like You."
Mr. R. C. Campbell.
(Encore: "Mighty Like a Rose.")
Song—"A Lullaby" (Kate Vannah).....Miss Maloney.

Miss Mary Robertson acted as accompanist.

After the artists had responded to the urgent requests of the audience by additional numbers, the company proceeded to the dining-room, where a sumptuous lunch was served. The effect there was strikingly brilliant as the soft lights shone upon the bright assemblage. There were over six hundred who partook of the hospitality of the city. These included many of Winnipeg's own citizens. Among the many pleasant events of the Western trip this will be long remembered as one of the most enjoyable.

Tuesday, September 18th.

The Convention was called to order shortly before 10 o'clock.

The President:—Gentlemen, I want to say to you that we are only this morning commencing the very heavy business that we have to transact for our Annual Meeting. We have only to-day and half of a day to-morrow, so that I shall ask you to convene sharply at the hours of meeting, and shall hope thus to get through this heavy agenda.

The first business of the proceedings was the appointment of Messrs. J. R. Marlow, Dakers Cameron, and F. P. Megan, as scrutineers, to count the ballots for the election of officers.

The President:—I will now call upon our General Secretary to read his report.

THE SECRETARY'S REPORT.

The Secretary then read his report as follows:—

To the President and Members of the Canadian Manufacturers' Association:

Gentlemen,—I have pleasure in submitting herewith a brief report of the work of the past year. I wish to take this, my first opportunity, of thanking the members of the Association for the honor done me by appointing me Secretary of your great business organization. Mr. R. J. Younge retired from the position of Secretary on March 1st last. The value of the service he rendered to the Association during the three years he was in charge of the office cannot be estimated. The Executive Council presented to Mr. Younge an illuminated address expressing the great regret felt by everyone on his retirement, and accompanied the same with a "Made in Canada" watch chain and locket. During Mr. Younge's term of office the Association was wonderfully progressive. It became a truly national body, and contributed much to the development of our country. Much of this success was due to Mr. Younge's personal efforts.

To follow Mr. Younge and also his predecessor, Mr. T. A. Russell, is an honor which I deeply appreciate. I bespeak the assistance of every member of the Association, and hope that together we may be able to continue the good work to the satisfaction of all.

Council and Committee Meetings.

The Association has had a particularly busy year. The many subjects dealt with by the Executive Council are discussed in the different committee reports. The Council has held eleven meetings. The average attendance was thirty-four, and it is worthy of note that the average number of members in attendance from outside of Toronto numbered fifteen. The standing committees have held seventy-nine meetings and the sections twenty-five, making a total of one hundred and fifteen meetings. These figures do not include any of the many meetings which have been held by the different Branches of the Association.

It is gratifying to be able to report a net increase in membership for the year of 265, an increase of surplus assets according to the Auditor's report of $2,675.23, and that the collections for membership fees and other accounts are well in hand, there being $1,660 less owing on our books than on August 31st, 1905.

Association Office.

The work of the general offices of the Association has for six years up to May 1st, 1906, been carried on in offices in the Board of Trade Building, Toronto. These offices have



A Portion of the Railway Yards at Winnipeg

for a long time been too small and unsatisfactory in other ways. In May, owing to a change in ownership of the Board of Trade Building, the Association had to seek new quarters. Permanent offices have been secured in the Traders Bank Building, now being erected. These will be laid out to suit the needs of the Association, and, in addition to private offices for the heads of departments and a general business office, will have a President's office, Waiting-room, Library and Writing-room, and Committee-room. I am sure that the members of the Association will find the new quarters in keeping with the size and importance of the Association. It is expected that the offices will be ready before January 1st.

I will not anticipate any of the many important recommendations which will be presented to the convention in the committee reports. Each report unfolds a year of careful and persistent effort on the part of your committees, and the good achieved will speak for itself.



Mr. J. F. M. Stewart
General Secretary, C. M. A.

The Association has now become a very large organization. It is one thing to say the membership exceeds 2,100 and quite another to appreciate what it means to have that number of factories represented in the Association, with their business interests centred in 246 Canadian towns and cities and their workshops scattered from the Atlantic to the Pacific. One of the great difficulties of the office is to get into close touch with the members who do not know what the Association has to offer them, or knowing, do not use the Association. An effort should be made to reach such members. Two ways have been suggested:

(1) That the President of the Association during his term of office visit at his pleasure, and accompanied by the Secretary, all the branches of the Association.

(2) That the Association should have a traveling Secretary, whose duty it would be to call on the members all over Canada for the purpose of keeping them in close touch with the Association work.

This first suggestion was made by the President, Mr. Ballantyne. The second has been before the Association for some time. I am hopeful that, if the amendment to the present by-law covering fees is carried, we may this year be able to add a competent traveling representative to our staff.

In closing, I wish to call the attention of the general membership of the Association to the enormous amount of work the officers, the Executive Council and the committees are called on to perform. These men, some of them acting almost daily, do so with a uniform willingness, and serve as a constant encouragement to the general Association staff, to which I wish also to refer. There are now thirteen in the general offices in Toronto, giving their whole time to your work. You all know the great success both Mr. J. R. Marlow and Mr. E. P. Heaton have met with in their respective departments. The Assistant Secretary, Mr. G. M. Murray, has been no less successful in the general Association work, and the efforts of Mr. F. P. Megan and Mr. B. L. Anderson on Industrial Canada are self-evident. I do not think the Association could have a more loyal or devoted staff, and I take pleasure in publicly acknowledging the cheerful assistance I have always received from not only the men I have mentioned, but every person identified with your work.

Respectfully submitted,

J. F. M. Stewart, Secretary.

The President:—Are you in favor of receiving the excellent report which the Secretary has just read?

The report was agreed to without discussion.

President to Visit Branches.

The President:—There are two important matters to which our Secretary has drawn your attention. One is the visit to the Branches of the Association by the President during the coming year. I wish to say that it will not be at the expense of the Association, but at the personal expense of the President. Our coming President is, as you know, a man with very wide business interests all over Canada, and he will have occasion to visit our principal cities. He will, of course, do so at a time when he can get the Secretary to go with him, or vice-versa. The Vice-President has just drawn my attention to the fact that the President would not pay the Secretary's expenses; it is, of course, understood that the Secretary would go at the expense of the Association.

Mr. Cameron:—I do not think the President should be at any personal expense.

Mr. John Stevely (London):—I have listened to the report that has been read by our worthy Secretary with a great deal of interest. I certainly commend every word that is contained therein. The only reason I rise now is, that some years ago Mr. Russell visited London, the establishment of a branch of the C.M.A. being in contemplation at that time. We had a representative meeting, with, I should say, about 35 or 40 people present. The membership in London has increased very largely since that time, and I think that at this meeting the question should be discussed whether you contemplate opening any more branches or offices in connection with the Association. If so, I think our city is entitled to your consideration. We are coming forward there, not possibly with leaps and bounds, but with a certain modest effort; and I am sure that our Secretary can say that in the last three or four years the Association's membership has been largely increased there. I think if we had a branch office in London it would be further increased, and I think that is the only way that we can keep alive and extend our activities throughout the Dominion. Therefore, Mr. President, I move that if any branch offices are to be opened, one should be opened in London. I have no doubt

any extra expense incurred in doing so would be gladly met by the members in London.

With regard to the expenses of the President and Secretary being paid by themselves, I think it would be an outrage to the interests of the Canadian Manufacturers' Association to allow such an idea to stand for one moment.

The President:—Mr. Stevely, with regard to the opening up of a branch in London, I can assure you as President that we appreciate very much the large membership we have in your good city. The opening of a branch there is a matter that will come up at the Executive Council at a later date. It is not a question that we can consider at this time. Mr. Cockshutt wishes to say a word with regard to your suggestion that the President's expenses should be borne by the Association.

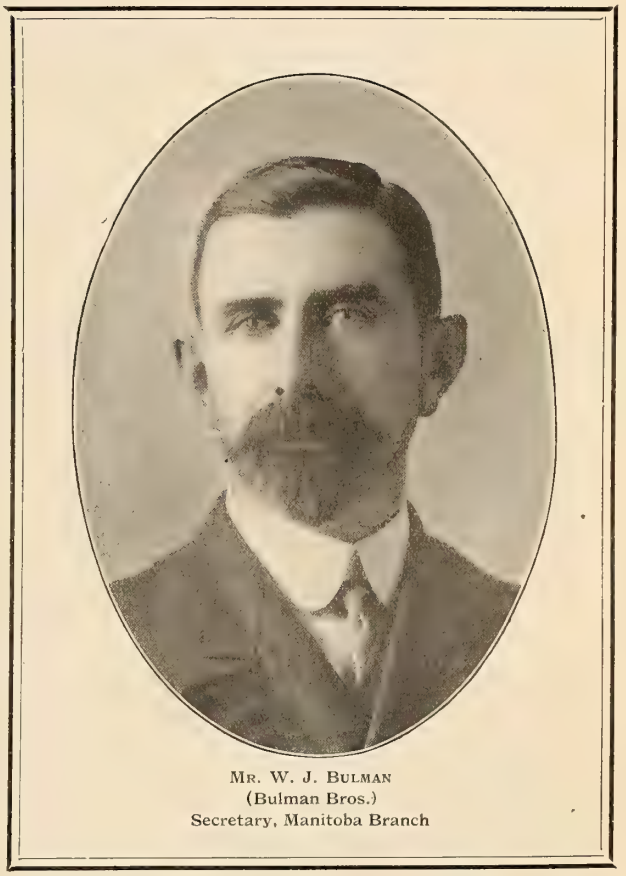
Mr. Cockshutt:—I may say that this matter has been broached at committee meetings, and it was suggested at the time that the expenses of the President and the Secretary might be paid. I myself then objected to the President's expenses being paid by the Association. I shall be very glad, as your President, to go and visit these branches at a time that will be convenient; but, so far as I am personally concerned, the honor of being President of this Association is sufficient for me, and I think it ought to be sufficient for anybody who goes as President to visit these branch Associations. A great many people differ in regard to expenses. My expenses may be very large in the eyes of the Association—(laughter)—, or vice-versa; be that as it may, I prefer to pay my own expenses, and I think that every President should visit the branches at his own expense. With regard to the Secretary, that is a different matter. The President's is a strictly honorary office.

Mr. L. C. McIntyre:—I was greatly pleased, Sir, with the address of the Secretary and the suggestion made that the President and Secretary visit the branches of the Association during the year. I think that it would greatly benefit our branch Associations and increase the interest that the branches have in the Association. No doubt you all understand that a branch like ours makes a great deal of work for our Honorary Secretary. He must interview most of the manufacturers before they join the Association. If the Secretary from the Association in the East came to assist him for a few days I think it would be very beneficial. I am sure it would greatly increase our membership. As far as the President's expenses are concerned, while I admire the spirit in which Mr. Cockshutt asks to be allowed to pay his own expenses, yet I think it would be unbecoming in the Association not to pay his expenses while he is traveling for the benefit of the Association. I for one do not approve of it, and I do not think any member of this branch of the Association will approve of it. The precedent thus established might prove burdensome to some future President. If a motion is necessary, I will move that the Secretary and President visit the branches once a year, or as often as the Executive Committee may deem it prudent, and that the expenses be paid by the Association.

The President:—I may be allowed to say a word, inasmuch as I am the father of this resolution. During my term of office, which is just about to close, I have felt very much the need of authority from our annual meeting to permit the president of this national Association to visit officially the various branches. I feel it as strongly as does Mr. Cockshutt that the expenses of the President should not be borne by the Association. I know if this had passed a year ago I should have preferred very much to have made these visits at my own expense. While I agree with much that Mr. McIntyre, Mr. Stevely and Mr. Cameron have said, yet I really do not think you ought to ask the coming President to allow the Association to pay his traveling expenses. So far as the Secretary is concerned, our Association has a perfect right to pay these expenses. Mr. McIntyre, if you will allow me to change the motion, I shall do so to make it read that the Association shall pay the Secretary's expenses.

Mr. McIntyre:—I cannot withdraw from my position.

Mr. J. S. N. Dougall:—Mr. Stevely has very kindly said that, as I was interested in the matter, he would allow me to second Mr. McIntyre's motion. It is undoubtedly an unbusinesslike proposition to suggest that any officers should go about the Association's business at their own expense. I have known Mr. Cockshutt personally for a great many years, and can quite understand the splendid manner in which he would be willing to throw himself into anything that would be for the good of the Association. Still, I feel strongly that all expenses of official visits should be met by the Association. I quite agree that such visits will do great good.



Mr. W. J. Bulman
(Bulman Bros.)
Secretary, Manitoba Branch

Mr. W. H. Rowley:—Now that there is a pretty general expression of opinion, I should like to make a suggestion. Rather than amend the report by such a motion as Mr. McIntyre has made, let the Executive understand the general feeling of the Association. There is nothing said about the expenses; we might pass the report, not only because it is a good report, but personally because you, Sir, have fathered it. We might let the Executive understand that, when the President goes on any business trip, the expenses be paid. Do you not think, Mr. McIntyre, that that would serve every purpose?

The President:—That will be satisfactory. You have heard the motion of Mr. McIntyre, seconded by Mr. Dougall. What is your pleasure?

The motion was declared carried.

Mr. Rowley:—Is that to be entered in the minutes as an amendment?

The President:—No, Sir; the report still stands just as it is.

Mr. Rowley:—Should not Mr. McIntyre and the Secretary be asked to withdraw the motion?

The President:—We must have it as a matter of record here.

The President:—The second recommendation in the Secretary's report is that the Association should have a traveling secretary, whose duty it should be to call on the members all over Canada.

Mr. Henderson:—Does that come up under amendments to the By-laws?

The President:—If you wish you can leave it to the General Executive Council. Is that your pleasure?

This was agreed to.

The President:—I am exceedingly sorry that Mr. Booth is not here to read his report. I shall ask the Secretary to read a letter from our Treasurer.

The Secretary read a letter from Mr. Booth, in which the Treasurer expressed the keenest regret at being unable to be present at the convention. He referred in eulogistic terms to the excellent work of the President and the Secretary during the past year, and closed with best wishes for the year to come.

The President:—I shall ask Mr. W. B. Tindall, Chairman of the Finance Committee, to read the report, in the absence of the Treasurer.

Mr. Tindall:—I regret very much that Mr. Booth is not with us to-day. There is no man that I know of, that has kept in such close touch with the financial side of the Association, or who has got such a grasp of the subject, as he has. However, I shall do what I can to make myself clear. The expenses have all been scrutinized by your Finance Committee.

THE TREASURER'S REPORT.

To the Members of the Canadian Manufacturers' Association:

Gentlemen,—I beg to present herewith the Financial Statement of the Association for the year ending July 31st, 1906. The statement has been marked, "Audited and found correct," by Mr. W. C. Eddis, F.C.A., the auditor appointed by you at the last Annual Meeting.

THE CANADIAN MANUFACTURERS' ASSOCIATION BALANCE SHEET AS ON JULY 31st, 1906.

Liabilities.

Fees paid in advance and unearned		$ 6,874 42
Accounts payable:		
Account INDUSTRIAL CANADA	$ 20 08	
" Expense	208 19	
" Translations	2 03	
" Annual meeting, 1906	15 00	
		245 30
Furniture Section		90 23
Balance surplus assets		7,400 06
		$14,610 01

Assets.

Fees owing, accrued, due		$ 269 91
Furniture and fittings	$2,763 58	
Less depreciation	209 00	
		2,554 58
Advertisements accruing, due and owing 31st July, 1906	2,461 32	
Accounts due—Insurance Department	528 35	
	$2,989 67	
Less reserve for bad and doubtful debts	750 00	
		2,239 67
Trade Index, 1905		3,448 15
New Zealand Exhibition account		415 25
Cash on hand	207 00	
Cash in bank as per bank book	$6,234 80	
Less outstanding cheques	759 35	
	5,475 45	
		5,682 45
		$14,610 01

THE CANADIAN MANUFACTURERS' ASSOCIATION REVENUE ACCOUNT FOR TWELVE MONTHS ENDING 31st JULY, 1906.

1906.				
July 31.	To Receptions	$ 51 60		
"	" Cement Section	16		
"	" Annual meeting	724 52		
"	" Expense (as per Schedule "A")	19,045 59		
"	" INDUSTRIAL CANADA (as per Schedule "B")	9,132 05		
"	" Furniture and fittings	209 00		
"	" Toronto dinners	2 30		
"	" Legal expenses	79 83		
"	" Insurance Department (as per Schedule "C")	3,984 72		
"	" Western excursion	31 40		
"	" Great Britain excursion	8 03		
"	" Bad debts	647 80		
"	By Membership fees		$	22,832 89
"	" Commercial reports			24 68
"	" Translations			12 40
"	" Interest			157 62
"	" INDUSTRIAL CANADA (as per Schedule "B")			10,406 22
"	" Insurance Department (as per Schedule "C")			3,111 53
"	" Dominion Exhibition			25 29
"	" George banquet			2 90
"	" Berlin banquet			70
"	" Balance	2,657 23		
		$36,574 23		$36,574 23

THE CANADIAN MANUFACTURERS' ASSOCIATION CASH ACCOUNT, 31st JULY, 1905, to 31st JULY, 1906.

Receipts.

Balance 31st July, 1905			$ 4,251 89
Membership fees	$25,669 35		
INDUSTRIAL CANADA	10,584 93		
Insurance Department, 1904-5	$ 387 73		
Insurance Department, 1905-06	2,565 10	2,952 83	
George banquet		190 65	
Expense account		181 44	
Interest		157 62	
Berlin banquet		154 00	
Dominion Exhibition		46 33	
Toronto dinners		46 00	
Penfold's Australian wine		148 00	
Furniture Section		90 23	
Annual meeting		74 00	
Translations and reports		86 13	
			40,381 51
			$44,633 40

Expenditure.

INDUSTRIAL CANADA	$ 9,492 28	
Expense	19,477 16	
Insurance Department	4,014 92	
Trade Index, 1905	3,529 93	
Western excursion	31 40	
Great Britain excursion	669 96	
New Zealand Exhibition	108 75	
Dominion Exhibition	21 04	
Annual meeting	795 77	
George banquet	190 75	
Toronto dinners	91 05	
Berlin banquet	153 30	
Membership fees refund	45 00	
Sundries	76	
Penfold's wine	15 50	
Legal expenses	79 83	
Receptions	51 60	
Commercial reports and translations	58 62	
Furniture	148 33	
		$38,975 95
Cash on hand 31st July, 1906		5,657 45
		$44,633 40

EXPENSE ACCOUNT.

Schedule "A."

Express	$ 16 86
Postage	1,317 28
Printing and stationery	1,059 13
Rent and light	850 44
Salaries	5,897 52
Telegrams and telephones	259 22
Travelling expenses	1,013 18
Exchange	170 38
Commission	105 00
Certificates	347 86
Transportation	3,980 26
Toronto Branch	132 19
Montreal Branch	2,109 11
British Columbia Branch	251 67
Nova Scotia Branch	324 14
Quebec Branch	398 90
Manitoba Branch	183 49
Sundries	628 96
	$19,045 59

Schedule "B."

STATEMENT SHOWING RECEIPTS AND EXPENDITURE OF "INDUSTRIAL CANADA" FOR PAST TWELVE MONTHS.

Expenditure.

Printing account	$ 3,632 78	
Paper	794 18	
Salaries	2,210 16	
Postage and distribution	697 31	
Commissions	980 54	
Electros	291 18	
Travelling expenses	160 30	
Telegrams and telephones	51 89	
Special literary matter	154 50	
Sundries	79 71	
Rent and light	54 00	
	$ 9,106 55	
Advertising	25 50	

Receipts.

Advertising display		$ 7,949 27
Advertising cards		1,739 79
Copies, sale of		717 16
Profit for twelve months	1,274 17	
	$10,406 22	$10,406 22

Schedule "C."

SHOWING RECEIPTS AND EXPENDITURE OF INSURANCE DEPARTMENT FOR PAST TWELVE MONTHS.

Expenditure	$3,984 72	

Receipts.

Fees received and accrued		$3,111 53
Loss for twelve months	873 19	
	$3,984 72	$3,984 72

There has been a marked and steady advance during the past year by our Association in all its departments and undertakings, and this is very noticeable in the above statement. I wish to refer only to a few features which I think should be emphasized. It will be observed that after providing fully for bad and doubtful debts and writing off $209 for depreciation on furniture our surplus assets are $7,400.46, which is an increase over last year of $2,657.23.

The receipts, which total $40,381, are $1,687 in excess of last year, and the expenditure, which amounts to $39,258, is $383 less.

Accounts owing the Association for membership fees amount to $269, which is $635 less than the amount shown in the last annual statement. Advertisements and accounts owing amount to $2,239.67, which is $925.98 less than last year. These figures show that the collections are being well looked after.

Canadian Trade Index.—On the balance sheet the large item of assets is Trade Index, $3,448.15. The Index is now published and is being distributed. It will at least pay its own way, and it is likely that it will show a small surplus.

"Industrial Canada."—It is gratifying to be able to report that INDUSTRIAL CANADA is now on a paying basis, and the year's business shows a surplus of $1,247.17. INDUSTRIAL CANADA is a great asset for the Association. It is a paper that the members of the Association may well be proud of. In addition to showing such a substantial profit it has been greatly improved. I feel that the INDUSTRIAL CANADA Committee has earned the thanks of the Association.

We are not justified in considering that the above surplus is a fixed annual addition to our revenue, and I would recommend that we accede to the request of the INDUSTRIAL CANADA Committee and allow them to spend such an amount of it as they may think requisite for the improvement and development of the paper.

Insurance Department.—In my last Annual Report I stated that there was a possibility that the Insurance Department would, during this year, be self-sustaining. The report shows, however, that it has cost the Association $873.19. The work that the Department has done has been very important, and had the original policy been continued the balance would have been on the other side. A good deal of time and money, however, have been spent by the manager of the department in investigations which subsequently led to the consideration of organizing Mutual Fire Insurance Companies, and it is expected that these companies will pay the expenses incurred on their behalf.

Transportation Department.—The Transportation Department has cost the Association $3,980.26, $289.95 in excess of the cost for last year. The money has been well spent. The report of the Railway and Transportation Committee is in your hands, and needs no words from me to convince you that it was a great step forward when the Railway and Transportation Department was inaugurated, and that the money spent by them has without doubt been beneficial not only to our members, but to manufacturers and shippers generally.

General Remarks.—The Finance Committee have carefully supervised the expenditure during the past year. It has been the aim to make the receipts from membership fees, which is our only reliable source of revenue, cover all the ordinary expenses of the Association. This they have been able to do, and such a policy must be pursued in the future.



Mr. Geo. Booth
(Booth Copper Company)
Treasurer

With the growth of the Association the cost of management must necessarily increase. Within a few months the head office of the Association will be situated in the Traders Bank Building, Toronto, in much more commodious and suitable offices than ever before. For these offices the Association has incurred an additional annual expenditure of $1,200.

Furniture.—No estimate has been submitted as to the cost of furniture and fittings for the new offices. It will doubtless amount to a considerable sum, and, being an extraordinary expenditure, I propose it be met out of the general funds of the Association, and not charged to revenue account.

British Office.—A report is to be submitted by the Special Committee re Association office in Great Britain, which calls for an appropriation of $2,000 by the Association. We must remember that while the report only asks the Association to provide $2,000, it will still be responsible for the whole outlay, which it is estimated will be at least three times that amount. I think before this expenditure is approved that the committee should clearly indicate the sources from which it expects to derive its revenue.

For the year 1906-1907 I beg to make the following estimate:

Revenue.

Membership fees	$25,690 00	
Sundries, interest, etc.	350 00	
		$26,040 00

Expenditure.

General expense	$21,000 00	
Insurance Department	1,000 00	
Increased rental	1,200 00	
Sundries (unforeseen)	1,000 00	
		$24,200 00
		$ 1,840 00

This estimate shows that the Association has no financial difficulties to fear, provided new work is not undertaken. My own opinion is, however, that the expenditure of the Association has now become so large that there is not sufficient margin between our receipts and expenditure, and I think that the amendment to the Constitution, which will be presented to this meeting, and which provides for a slight increase in the membership fees from firms employing between 50 and 100 hands, is in the right direction and should be supported. The increase in fees was debated at the last Annual Meeting, and was generally approved of, and the by-law that will be submitted was, in the opinion of the Finance Committee, the best method to adopt.

Respectfully submitted,

Geo. Booth,
Treasurer.

The President:—Gentlemen, you have heard the financial report of the Treasurer. Its adoption has been moved by Mr. Tindall and seconded by Mr. Henderson. Is it your pleasure that the report be adopted?

The report was unanimously agreed to.

The President:—Is there anything here any member wishes to discuss? The question of the British office will come up later, when the British Office Committee make their report, so I do not think we need spend any time on this matter now.

Mr. Rowley:—Before this report is finally disposed of, I think it would be a courteous act to adopt a resolution expressing our regret at the absence of Mr. Booth, who is the oldest officer in the Association. His absence is keenly felt, especially by those of us who have had the benefit of being personally connected with him. I think this is the first time he has been absent from our annual conference.

The President:—He has been Treasurer for twenty-six years, and we all know what an excellent Treasurer he is. He has never previously been away from an annual meeting, and I know that no one regrets his absence more than he does himself.

A unanimous standing vote was recorded.

Telegram to Mr. Booth.

The following telegram was at once sent to Mr. Booth:

It has been moved by W. H. Rowley and seconded by every member present and unanimously passed by a standing vote, that we all sincerely regret your unavoidable absence from our thirty-fifth annual general meeting; felicitate you on your continued good health; appreciate your earnest, constant and valuable aid to the Association during many years past, and pray that God may of His goodness spare you for years to come, as our worthy, genial and able Honorary Treasurer.

REPORT OF THE PARLIAMENTARY COMMITTEE.

Mr. George W. Watts, Chairman of the Parliamentary Committee, read the report of the committee.

Your Parliamentary Committee is pleased to present herewith a report of the work undertaken at the eleven meetings of the committee held during the past year.

Labor Conditions.

Labor conditions are on the whole satisfactory. Strikes in manufacturing establishments have not been numerous. Wages have, during the last few years, been on the increase, and workmen have been given steady employment. Employers have learned the necessity of keeping control of their shops, and have shown that they are not prepared to discriminate against any competent workman just because he does not belong to a labor organization. The "open shop" has made headway.

The greatest need of the manufacturer to-day is skilled help. The Dominion Government has issued instructions to its immigration agents that the immigration of factory workmen and skilled mechanics must not be encouraged. This policy reacts on the farmers. Many immigrants that come to Canada to go on the farm are being attracted to the factory by the higher wages. It is unreasonable for the Government to undertake to populate the vacant lands without at the same time providing for an increase in the size and number of the factories and cities. Where are the Western Canadian cities that are calling for factories to get the skilled help necessary for manufacturing? In addition to the discouragement offered by this immigration policy there is the Alien Labor Act, designed to prevent manufacturers from securing workmen in the United States. Further, no effort is being made by the Dominion Government to train our own people as they are trained in other countries by providing the opportunity for a thorough system of technical education, and while the efforts of both the Federal Government and the Municipalities are directed to encourage United States manufacturers to locate in Canada, no effort is made to provide them with skilled help, and they are expressly forbidden to bring their workmen with them.

Demand for Labor.

The members of the Association were addressed on June 28th, 1906, for the purpose of ascertaining their labor requirements. The replies received show an actual shortage of 6,273 hands. The details of this return, together with previous enquiries, are as follows:

	Men.	Boys.	Females.		Total.
March 2, 1903.....	....	....	....	....	11,104
January 14, 1904.....	2,123	385	2,189	....	4,697
June 10, 1904.....	2,521	859	3,337	....	6,717
			Women.	Girls.	
February 10, 1905...	1,329	86	218	114	1,747
June 28, 1906.....	3,394	265	1,231	1,183	6,273

This information the Association has made public through the Canadian and British press.

In the same letter an expression of opinion was invited as to the advisability of the Association taking steps to secure the help needed. The replies to this enquiry were so favorable that your committee recommended the Executive Council to appoint a special committee for the purpose of investigating the cost and usefulness of opening an office in Great Britain for this and other purposes. This committee was appointed, and have a report to submit to this Convention.



The Automobile Trip Round the City.—Ready to Start

Dominion Parliamentary Matters.

It is a pleasure for your committee to report that it has not been necessary for the Association to oppose at Ottawa any demands of organized labor.

Lord's Day Act.

Representations were made opposing certain clauses of the Lord's Day Act as originally drafted, the purpose being,—

(a) To protect manufacturing establishments from being compelled to close down on Sunday when to do so would cause serious losses or interfere with the manufacturing process.

(b) To have provision made for keeping up steam for purposes of heat and fire protection.

(c) To allow such repairs to be made as would be necessary for the operation of a plant on the following day.

(d) To permit of the movement by transportation companies of all export freight.

The Act as originally introduced was so objectionable that it had to be practically redrafted, and in the new Act the manufacturers' interests are protected.

Gold and Silver Stamping Act.

The Gold and Silver Section of the Association prepared a bill to protect the buyer of gold and silver articles from being deceived by fraudulent quality and quantity marks, and to protect the honest manufacturer from the competition of manufacturers who stamp their goods for the express purpose of deceiving. The bill, which was approved of by the Government and passed, provides that an article of gold or silver does not need to be stamped at all, but if it is stamped it must be stamped correctly and in accordance with the Act. It puts foreign-made articles on exactly the same footing as "Made in Canada" goods. Severe penalties are imposed for infringements.

Prison Labor.

The support of the Association was asked by certain manufacturers of brooms and woodenware in protesting against the contract made by the Ontario Government for the sale of labor at the Central Prison, Toronto. It was claimed that the prices charged for such labor were so low that the contractor would be in a position to undersell the independent factories. It was decided that the Association had not sufficient evidence before it to take action, but that it should put itself on record regarding the whole question of prison labor. The subject is one well worthy of discussion at this meeting, and we would recommend the Convention to indicate the attitude of the Association, that it may be taken up and dealt with by the incoming committee.

Extra Provincial Corporation Taxes.

The Association at its last Annual Meeting passed a resolution condemning the unnatural trade barriers that the Provincial Governments were erecting by taxing extra-provincial corporations and commercial travellers.

These taxes have not been modified, and the committee would ask that this resolution be reaffirmed and sent to all the members of the different Canadian Legislatures. The resolution is as follows:

"THAT WHEREAS the extra-provincial corporation taxes imposed by the Provincial Governments throughout Canada, and also the taxes imposed by certain Provinces of Canada on Canadian commercial travellers resident in other Provinces, are raising unnatural barriers between the Provinces of the Dominion, and as such are a direct restriction to trade;

"BE IT RESOLVED, that this Association, in annual Convention assembled, urge upon the Provincial Governments the necessity of abolishing all such legislation now upon the Provincial Statutes, and the bringing about, as far as possible, of co-operation between the Governments and business men of various Provinces, which will result in the freest trade intercourse and the building up of national rather than Provincial commerce."

The Quebec commercial travellers' tax applying to travellers resident outside of Canada has been modified as to the license fee, but is still effectual against Great Britain.

Exportation of Silver Coinage.

At the 1903 Annual Meeting of the Association a resolution was unanimously passed asking the banks and the Government to co-operate for the purpose of exporting the foreign silver coinage in circulation in Canada. This resolution was acted on and large quantities of silver were shipped to the United States. The Government estimates of this year did not provide for a continuance of this arrangement. The committee recommends that the Government be requested to continue the exportation of foreign silver coinage.

Ontario Legislation.

The Ontario Assessment Act has now been in operation for two years, and, as expected, the change from a tax on personalty to a business tax on a percentage basis has resulted in many inconsistencies. The Ontario members were asked to submit their views and to state any changes which they considered necessary.

The replies showed:

(1) The approval of the principle of the business tax as a substitute for a tax on personalty.

(2) The present Act discourages expensive buildings.

(3) Shareholders, who are also officers in incorporated companies, pay a double tax.

(4) Incorporated companies and partnerships are not treated alike.

(5) The business tax on manufacturers is too high when compared with taxes in other Provinces and on other branches of industry in Ontario.

(6) Information with regard to employees' wages should be secured from employees.

(7) Responsibility for delivery of assessment and tax notices should not be on the employer.

All the above important points were presented to the Ontario Government by memorial. Later a Bill was drafted and introduced into the Legislature calling for a reduction in business assessment from 60 to 50 per cent., and putting shareholders in stock companies on the same footing as partners in regard to income. This bill was considered in committee, but the Government decided not to amend the Act at the last session. The Assessment Act is one which will require careful attention from the incoming committee.

Stationary Engineers.

The Act to amend the Act respecting Stationary Engineers gives probably the worst example of hastily considered legislation that your committee has had to discuss. This Act makes it compulsory for every engineer in the Province operating a plant of over 50 h.p. for power purposes to pass an examination prescribed by a board of examiners appointed by the Lieutenant-Governor-in-Council. This part of the bill the Association did not oppose. It goes further, however, and places under the absolute control of a Board of Management all the fees collected by the examiners. These fees are to be used to pay the examiners and to defray other expenses which are not defined. In order that the Board of Management may always have sufficient funds at their disposal every engineer has to pay an annual license fee. This bill was opposed and several amendments secured, but the committee regrets that the legislation was ever allowed to pass.

Your committee would recommend that the Parliamentary Committee for 1906-07 be asked to have a bill for the compulsory licensing of stationary engineers drafted and presented to the next session of the Ontario Legislature; such Act to provide for strict examinations by competent examiners, graded certificates, elimination of any payments by engineers after the first fee for examination purposes,

and the control of all moneys by the Government and not by an independent organization.

Several bills imposing absurd restrictions on the running of automobiles were successfully opposed. The Association also made representations respecting amendments to the Conditional Sales Act, and was successful in having some clauses modified considerably.

Quebec Legislation.

In the Quebec Legislature more measures than usual affecting manufacturing interests were introduced, some designed to increase taxation, others to handicap the employer in his dealings with labor. Some of this legislation was so serious that a general meeting of Montreal members was called in March and legal services engaged to watch the Association's interests.

Partly as a result of the efforts of the Montreal and Quebec Branches the proposed increase in the tax on incorporated companies to one-fifth of one per cent. upon the paid-up capital up to $1,000,000 was modified to one-eighth of one per cent.

The determined opposition of the Association resulted in the proposed tax of twenty five per cent. on all premiums paid to extra-provincial fire insurance companies not licensed to do business in the Province being reduced to practically one per cent.

The Quebec tax on non-resident commercial travellers representing foreign businesses was opposed by two delegations. The tax has since been modified, and one point brought up by our delegations to the Government has resulted in a provision that any commercial traveller taking orders for factory supplies which cannot be procured in the Province shall pay a tax of $50 instead of $200.

Other measures of a dangerous character, such as the Workman's Compensation Bill and the Lafontaine Bill respecting industrial establishments, were successfully opposed.

Alberta Legislation.

The Province of Alberta adopted, with certain modifications, the Steam Boilers Ordinance, 1901, of the North-West Territories. Certain suggestions made by the Association were favorably considered and incorporated. The most important are to the effect that the employees of Canadian manufacturers of boilers and engines, when engaged setting up or installing plants, do not need to take out licenses, and where a licensed engineer cannot be obtained a permit may be issued for a period of thirty days to another party in order to allow the plant to operate. One clause in the bill which might well be adopted by all the Provinces is to the effect that certificates of qualification issued by the Dominion or other Provinces will be accepted by Alberta.

The committee wishes to express its appreciation of the services given by the Provincial Officers and Branches of the Association in dealing with the Provincial legislation referred to above.

All of which is respectfully submitted.

GEO. W. WATTS, Chairman. J. F. M. STEWART, Secretary.

The adoption of the report was moved by Mr. Watts and seconded by Mr. G. A. Vandry.

The President:—You have heard the Parliamentary Committee's report, the adoption of which has been moved and seconded. Is it your pleasure that the report be adopted?

Mr. Alex. Saunders:—I think this one of the most important committee reports we have, as it deals strictly with matters which touch every one of us in our manufacturing interests. During the year, while attending meetings in Toronto, I was very much impressed by the work done by this Committee, and by the energy with which the various Resolutions and Bills introduced into Parliament have been watched by our Secretary and Committee in charge. No department of our Association requires such careful consideration as our Parliamentary work. The thanks of the Association should be given to the gentlemen who have so carefully supervised the work during the year. I think, if you will refer to many of the clauses in the report, you will notice that they have done this Association a great deal of good in looking after our interests, particularly in regard to labour. That is one thing that struck me very forcibly. In my factory I have had men from the Old Country, and I find there are few expert mechanics among the immigrants. I have had two or three clever mechanics and machine men who were industrious and energetic, and they have been faithful in the discharge of their duties, but I have found that the majority have been laborers and not mechanics. I should like to impress on you the importance of showing the Government that the industries of Canada require skilled workmen. Labor coming to this country has been particularly identified with the agricultural class, to the detriment of manufacturers.

We are using every effort to induce manufacturers from the United States to establish factories in Canada. Yet our Alien Labor Law prevents them bringing in their skilled labor by which their factories may be operated. There are in my own business a number of very important machines, which should be run by expert workmen, and which I wish to bring over to Canada to establish a factory here. Now I am told we cannot bring the workmen required to operate these new machines. Yet they are patent machines, and cannot be run by inexperienced hands. There should be no restrictions placed on the introduction of skilled mechanics.

There is one other thing that this report deals with, and that is the effort of manufacturing jewellers to introduce a standard for their goods. In England a child may purchase anything in the way of gold and silver jewellery, and be perfectly satisfied that he is getting full value for his money. I should be pleased to see the same condition brought about in this country by our Association. The question of factory assessment, too, is one with which the Committee should deal during the coming year. In conclusion, I wish to propose a hearty vote of thanks to this Committee for the work they have done during the past year.

Mr. T. R. Deacon:—I only wish to make a few remarks on this report, particularly in regard to the labor question. I do not know if it is the proper place to bring it up.

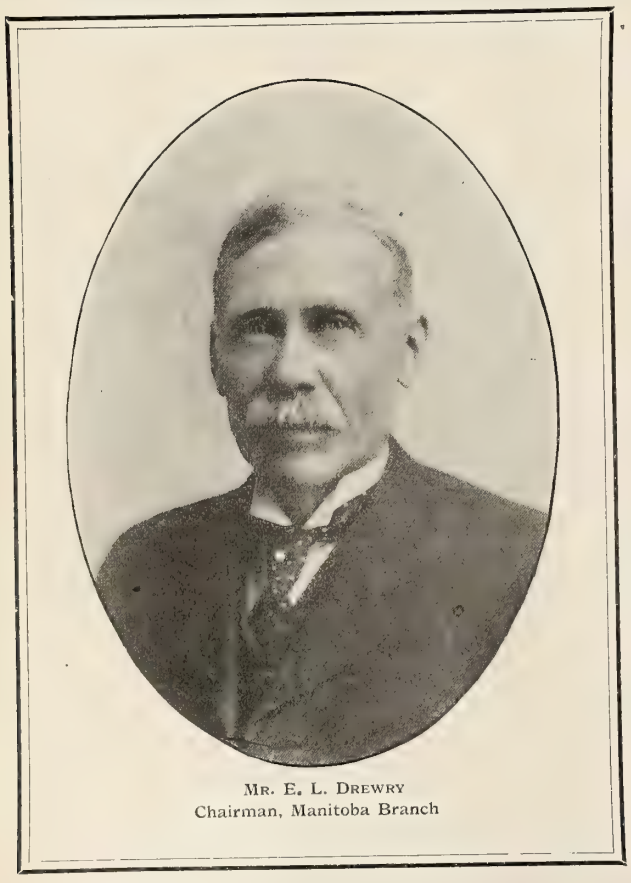
The President:—That will come up when we take up the question of opening an office in London.

Mr. A. R. Williams:—I am very glad that this Association is giving so much attention to these most important questions. I have felt for many years that local legislation is or may become a menace to the interests of manufacturers in Canada. The late R. S. Williams and myself, more than twenty years ago, organized an Association of Manfacturers and watched all legislation, employing our own solicitors. The present Conditional Sales Act was drafted in the office of our solicitors, and the amendments have nearly all been drafted there. I am very glad this Association is taking up this work, together with questions of class legislation. These latter came up and were met by this same Committee, particularly in the question of certificated engineers. This subject was put off from year by year by the personal efforts of a few in Toronto. I regret that this Association did not have better success last year in connection with the Stationary Engineers Bill.

However, it did succeed in having some of the most objectionable features eliminated.

I take this opportunity of saying these things, in order to urge that we be on the alert, and not let legislation go on the statute books which is disadvantageous to manufacturers. Then as to the Assessment Law, we can not be too careful in regard to amendments. I do not see why one class should pay on an assessment of 50, and another 60, and another 75 per cent. of their premises. It seems to me that the whole system is wrong, and I am glad to see that there is some xpression in regard to this.

Mr. S. R. Wickett:—There is just one thing I thought of in regard to the legislation bearing upon companies. I find that we in Toronto are not placed upon the assessment roll at all as property owners. When our property is put into a joint-stock company we lose our right to vote on many of the by-laws in the city. I think this matter should be looked into to see that property is represented.



Mr. E. L. Drewry
Chairman, Manitoba Branch

Mr. Deacon:—I brought that point up before numerous organizations here in Winnipeg. An incorporated company may hold a large amount of land on which improvements are projected, and yet they have no voice in the expenditure of money.

I should like to make a short report in regard to Stationary Engineers' Bills. A similar act was introduced in the local legislature last Spring, but the local branch of our Association took energetic steps and brought a large number of citizens together and so impressed the country members with the hardship it would be to their constituents, in regard to agricultural boilers, if it were allowed to pass, that we gained our end. By the proposed bill you could not even fire up the boiler in your own house for heating purposes, nor could your servant put a fire in your own house, without consulting the engineer. We had everything wiped out except the preamble. (laughter).

Mr. Tindall:—I think it would be well to follow the example of the Toronto Branch, which has got that matter specially on its agenda for the next year, and in order that it may be followed out, I move that all the Branches be asked by the Association to make this a special matter for consideration during the coming year.

The President:—If you will be good enough to draft a resolution and place it before the Resolutions Committee, it will be taken care of. I am glad you have mentioned the matter, as it is a very important one.

The motion was seconded by Mr. W. K. George, and on a vote having been taken was declared carried.

REPORT OF THE TECHNICAL EDUCATION COMMITTEE.

In the absence of the Chairman of the committee, Mr. S. Morley Wickett, the report was read by Mr. S. R. Wickett.

Your Technical Education Committee, who were continued in office for the purpose of memoralizing the Dominion Government in regard to the appointment of a Commission to report on the best method of establishing a comprehensive national system of technical education, have pleasure in submitting the following summary of their year's work.

At the invitation of the Toronto Branch of the Association attention was first given to the needs of Toronto and locality in regard to industrial education. A preliminary discussion with the Principal of the Toronto Technical High School led to a careful investigation of local conditions and their relation to the Province at large, as a result of which your committee felt itself constrained to take an active part, along with other organizations, in formulating certain recommendations to the Board of Education and the City Council looking to the erection of new and larger technical schools. We are pleased to report that these recommendations were received with favor; the civic appropriation for education was substantially increased, and it only remains for the Board of Education to complete its plans before work is commenced.

In taking this step your committee did not fail to recognize the fact that a large central technical school could not in itself meet the requirements of a given territory. The most effective work is that carried on in small schools that are in close touch with local industries. At the same time such local schools cannot entirely do away with large, centralized institutions, which act in some respects as stimulators and supervisors, and the establishment of such institutions is, therefore, to be encouraged.

The next step was to meet the University of Toronto Commission. As the findings of this Commission would be a precedent of importance to the whole educational community in Canada, the committee's work was carefully prepared. Your committee notes with considerable satisfaction that practically all its recommendations are to be found in the Commission's report as presented to the Ontario Government.

Some of these recommendations are:

(1) The definite co-ordination of practical and theoretical branches of University work.

(2) Provision for laboratory and other work by manufacturers and their employees, who are not regular students of the University.

(3) The need for the University to consider how it might better aid the advancement of industrial research, e.g., by

summer and evening courses; also by awarding scholarships and bursaries to outside industrial students.

The agreement of the Commission with these recommendations gives some promise of a modified attitude on the part of the University towards industry. Your committee is of the opinion (an opinion which is evidently shared by the Government Commission) that a University, particularly in a young country like Canada, should seek to meet the wants of the country at large, and not aim at being merely a cultural institution in the older sense. We have no leisure class. Everyone, whether he enters a University or not, must be trained to earn his own living.

The most important work undertaken during the year was, however, the formulating of a petition to the Dominion Government, praying it to appoint a commission in the interests of the whole country to consider the needs of the Dominion as regards industrial education, and the means whereby those needs could be most readily met. This work was, of course, marked out for the committee by our last annual Convention.

In introducing this petition your committee pointed out that there was no gainsaying the importance of industrial education. Industrial education means a very great deal, especially at the present epoch in our expanding trade and general development of our industrial resources. On every side the necessity was felt for immediate enquiry along the lines indicated on account of the lack of knowledge on the part of educationalists as to the needs of Canadian industry. Moreover, as shown by resolutions from branches of the Association in the various Provinces and from leading Boards of Trade, by letters from the Presidents of all our large universities, as well as by the resolution passed by the Trades and Labor Congress, public sentiment was unanimous in support of the appointment of a Dominion Commission for purposes of enquiry. Such an enquiry, it was recognized, did not necessarily involve action by the Dominion Government, but sought merely to arrive at a definite conclusion as to what the present needs of Canada are in the way of industrial training.

Federal Support.

At the outset the committee, while recognizing the overwhelming demand for industrial efficiency by manufacturers in every corner of the Dominion, had to consider carefully the question of the relation of the Dominion Government to education. After mature consideration the committee came to the conclusion that precedent in other federal countries, such as the United States, Germany and Switzerland, was in favor of federal support to technical education because of the general interest in the development of trade and commerce. Your committee pointed out that the Dominion Government itself was already doing a great deal of educational work of a technical nature, e.g., in establishing experimental stations for agriculture and forestry, in supporting engineering courses at Kingston and McGill, in establishing biological stations in connection with fisheries, in supporting industrial institutions and travelling exhibits, in investigating the adulteration of food stuffs, and in many other ways.

The delegates of the committee were cordially received at Ottawa, and are now awaiting developments. Thus far, there has been no favorable opportunity for definite action on the part of the Government, but in the early part of next session it is hoped and expected that favorable action will be taken.

As emphasizing the urgency of the case, your committee may call attention to the fact that, at the lowest estimate, $100,000 is paid out yearly by Montreal mechanics alone to foreign correspondence schools that offer them facilities for industrial education which they cannot obtain at home. A similar situation is to be found in Toronto, Hamilton, London and other industrial centres, so that probably upwards of half a million dollars is paid out every year by Canadian mechanics for better industrial training. And yet, one of the greatest needs of Canada is for properly trained employees, a need felt by both employer and employee.

The committee in closing its year of work recommends that the Technical Education Committee of the Association be made a standing committee, not alone because of the desirability of co-operating with the anticipated Educational Commission, but because of the permanent need of caring for matters relating to industrial efficiency.

All of which is respectfully submitted.

S. Morley Wickett, Chairman. J. F. M. Stewart, Secretary.



Mr. S. M. Wickett
(Wickett & Craig)
Chairman, Technical Education Committee

Mr. Wickett:—I understand that the committee met with a good reception from the Government, and that there is a clear intention of some practical work in the near future. I beg to move the adoption of the report.

Mr. Charles McDonald:—I second the motion. I have received a letter from a gentleman in St. John which I would like to read:

"I understand that the Manufacturers' Association has expressed itself on several occasions as being very strongly in favor of a complete governmental system of technical education, so as to give employers a better skilled class of men from which to select their foremen and other skilled labor. Do you think it would be quite feasible for the Manufacturers' Association to place before the Federal Government a broad plan for technical education, by which we would reserve about $2,000,000 to be expended pro-rata of population in each province? This amount should be ex-

pended only for manual training schools, mechanical schools, technical high schools, textile and other industrial schools, and particularly agricultural schools. As these two (agricultural and mechanical industries) are the basis of this country's wealth, should not the Government recognize that and be willing to spend large amounts of money to foster them? It would need only the co-operation of centres like Halifax, St. John, Quebec, Toronto and a few other cities, co-operating strongly, to force this upon the attention of the Government, especially as these cities would have the very strong influence of the Canadian Manufacturers' Association. In the Springfield High School (population 73,000) just erected, the top floor is now given up to mechanical drawing and one floor at the wing for electrical work, wood finishing and free-hand drawing. This shows you how Springfield, Mass., is laying the foundation for its mechanics to compete in the markets of Great Britain against Germany and other countries. The special feature of this school is that it requires from every student four years of varied practice in use of hand and machine tools. The expense in 1905 was $30,000. I notice that the Sackville Academy has a special building for technical education which has been largely endowed by ex-Governor McLellan. And even the trade journals of Montreal are now favoring the same idea. I visited the Boston Technical School last March, and found a number of Canadians there who pay $500 to $600 a year for education which they should be able to get in their own country. It is estimated that fully $1,000,000 was paid out by Canada during the last few years by young men who studied in the Correspondence School of Scranton, Pa. The education they receive in this way is rather meagre, and it costs them from $35 to $50 a year. If the Government would be contented to spend considerably less upon forts, arms, and equipment of militia, they might well afford to spend considerably more through the separate provinces upon such education as will give us more skilled mehcanics. From what I have heard I am quite sure that it would meet with general approval if a resolution based on this were introduced at the convention of the Manufacturers' Association, asking that all Boards of Trade throughout the Dominion should co-operate with them and press the matter before the Government during the winter. My personal standpoint is that the great labor classes of the country should receive a much better education on these lines than they are receiving. They do not need such studies as Latin, Botany, Algebra, but they do need such studies as Physics, Geometry, Drawing, and all of that which pertains to their work. This applies, of course, particularly to both the mechanic and farmer. I think you will find that very many of the Boards of Trade would assist the Manufacturers' Association if they put these ideas into a resolution at their meeting next week."

Cost of Correspondence Courses.

Mr. Watts:—I want to call your attention to the last clause of this report. It is the most important clause contained in it. You will notice that $100,000 is quoted as going from Montreal every year for technical education. A great deal of this is wasted. Correspondence Schools in the United States are working in Canada, inducing men to join, and they make a big profit. Mechanics and others get some benefit, but they do not get anything like the benefit they would if the money was put into some proper channel at home. Some time ago a man was quoted in the newspaper as giving six ways for educating oneself, and the last of these was the Correspondence Schools. We must impress upon the Government the necessity for promoting technical schools. If one fifth of the money which is sent abroad to correspondence schools were spent at home, four or five times more good would be done.

Mr. Henderson:—Skilled mechanics have become so scarce in Canada that we have to consider opening an office in London and bringing skilled men to this country. That is all very well in its way, but we have to get a little further than that. We have to establish technical schools. Bringing in mechanics is only a temporary expedient. Our own young people can learn to use their hands. If we had technical schools I think we would soon have competent artisans. I agree with the last speaker. I think it is probably one of the most important reports to come before this convention. I perhaps feel more strongly on the subject, as I know from experience the work which an engineering college accomplishes. I believe the statement of $100,000 going out from Montreal annually is not above the mark. In our office not a day passes that there is not either money being sent out to these Correspondence Schools or correspondence coming in. I believe 90 per cent. of it is absolutely wasted. I believe if this Association would take up the matter systematically, a good deal of actual benefit could be secured.

I have always felt that scientific and technical education should start in the public schools. As soon as a child can comprehend ideas he should be taught chemistry, elementary physics and dynamics, and as soon as he can grasp the principles of higher mathematics, let him be taught algebra and geometry. There should be no more difficulty in this than in learning to read music. In England children study Greek and Latin at an early age and accomplish a great deal in this way. I believe it is said that John Milton could read Latin fluently at eight years of age. If children utilized in Public Schools the time they waste in fads, in studying elementary chemistry and mechanical drawing, by the time they were 14 years of age they would have an idea of the fundamental principles that would suffice as a foundation for their future education. I hope the Committee on Technical Education will continue their work along these lines during the coming year.

After some further discussion the report was adopted.

REPORT OF THE INSURANCE COMMITTEE.

Mr. P. H. Burton, Chairman of the Insurance Committee, then introduced the report of that committee.

The work of the Insurance Department during the year has continued steadily and successfully on the advisory lines outlined in last year's report, as the following statement shows:

	No. of Members.	Amount of Insurance.
Policies examined	29	$ 3,994,000
Risks inspected	116	6,777,994
	145	$10,771,994

	No. of Losses.	Amount of Losses.
Losses adjusted	2	$ 24,552

Since organization on February 1st, 1905, the services of the Department have been utilized by 271 members in relation to the adequacy of the fire insurance carried, and to inspection with a view to suggesting improvements in risks and lessening the burden of the insurance tax, as follows:

	No. of Members.	Amount of Insurance.
Policies examined	107	$10,751,274
Risks inspected	164	9,706,514
	271	$20,457,788
	No. of Losses.	Amount of Losses.
Losses adjusted	7	$ 67,874

Increased Number of Inspections.

It will be apparent in comparing these two statements that the character of the work has shown a marked development, during the past year, on lines of personal inspection, while there has been a corresponding decrease in the purely office work in the technical examination of the conditions of the insurance policies. In the six months of 1905, 48 inspections were made, against 116 during the last year, and the committee express satisfaction at this result because it evidences much greater usefulness and benefit to the members who have availed themselves of the manager's services. A personal inspection necessarily involves consideration of all the problems that enter into the complex insurance question after a study of conditions on the ground, and it must, therefore, be more complete and satisfactory than can possibly be the case in dealing with matters at long range through correspondence.

Results of Work.

It is almost impossible to present a statement that will convey an intelligible appreciation of the results of the work thus outlined, so much of it being intangible and difficult to place under any given heading, but in so far as a record is possible it may be thus summarized:

(1) 146 insurances arranged and new schedules printed.

(2) Direct annual saving in insurance premiums of $17,904.91, through improving risks or re-arranging business.

The committee think it well to record as a matter of interest that of the 271 members dealt with since February 1, 1905, having insurance in force to the extent of $20,457,788, losses have been sustained by three members involving a gross loss payment by the insurance companies of less than $1,500, and of these only one necessitated the services of the Department in its adjustment. We have represented six other members in adjustments, but in none of these instances had the insurances of the members received prior attention. It is necessary to mention this division to explain a seeming inconsistency in the record of losses adjusted as previously given.



The Guests of Mrs. E. L. Drewry Taking the Cars at the Country Club

Business Passing Through the Department Shows Trifling Losses.

The very trifling losses sustained by the 271 members whose business has passed under the supervision of the Department is a remarkable showing, but it can only be accepted as an incident worthy of note rather than an experience from which definite conclusions may be safely reached.

If the facts point to any conclusion at all it is in emphasizing the belief prevalent amongst manufacturers in Canada that the losses sustained by them in recent years do

not warrant the high rates they are charged. Statistics are not available to make this belief an absolute certainty; the fire insurance companies themselves are the only source from which such figures can possibly be obtained, and, as they have never yet supported the contention so often repeated that "Your class of risk does not pay" by the production of any confirmatory evidence of actual results, we can only accept the best evidence obtainable and form our opinion and judgment accordingly.

The committee believe the members of the Association have not yet realized the important service the Department can render in the matter of fire loss adjustments, particularly in the direction of facilitating speedy settlements, and thereby saving much valuable time in recommencing operations.

Correspondence with Canadian Fire Underwriters' Association and its Results.

During the year correspondence was entered into with the insurance companies forming the Canadian Fire Underwriters' Association, with a view to the conclusion of arrangements that would permit the Department to place business with them, untrammelled by any restriction that made it obligatory to confine our business dealings to the companies forming that Association. The letter to the companies which opened the negotiations, and which was dated October 31st, 1905, recited the aims and objects of the Department as follows:

(1) The supervision of the policies of insurance covering the plants of its members and rendering advice as to the adequacy of forms, policy wordings, the acceptability and standing of companies whose policies are issued to the members.

(2) The protection of the interests of the members in the event of fire.

(3) The collection of reliable statistics showing the results in premiums and losses, by classes and periods, of the business of its members.

(4) Suggesting improvements in construction, distribution or protection, with a view to obtaining reduced rates and the lessening of the causes and results of fires.

(5) Improvements in municipal water supplies and fire-fighting appliances, proper building laws, and the enforcement of by-laws regulating the storage of inflammable substances.

This was followed by a further letter, dated December 4th, and replies were received from 27 of the 31 companies to whom the correspondence was addressed; of these, fourteen declined to discuss what they termed "The delegation of inspection work to irresponsible officials," or the payment of commission on business placed with them, but they were prepared to participate in a conference if the discussion was limited to the problem of improvements in our members' risks; four companies declined to participate in the conference on the lines laid down; three companies expressed their willingness to confer without restricting the scope, provided the Association would assist them in securing relief from burdensome taxation and protection from the competition from unlicensed companies; six companies disposed of the correspondence without meeting in any way the suggestion for a conference.

The replies received clearly revealed concerted action on the part of the companies to frustrate the purposes of the committee, and left us no option but to close the correspondence.

The action of the tariff companies made necessary the adoption of one of two courses: either that the placing of business with them should be suspended, or that the Department should make arrangements to indirectly accomplish the results they were seeking to obtain. No insurmountable difficulty would have been encountered in indirectly placing business through representatives of members of the Underwriters' Association, but as this involved arrangements not in accord with the regulations of that body, it is scarcely necessary to say that your committee did not entertain propositions that had been made to them along that line. If the opportunity to do business with the tariff companies legitimately and freely was denied to us as an Association, no other course could be recommended or adopted than of ceasing to do brokerage business with them. This was the course your committee adopted, and they feel sure their action will be approved by the members at this Convention.

Mutual Fire Insurance.

Since the last Annual Meeting the committee have given earnest consideration to the problem which was largely responsible for their appointment, viz., how to secure for the members cheap, adequate and reliable fire insurance. Under the direction of the committee the manager of the Department has investigated the various classes of fire insurance companies or associations operating in our own country and in the United States, and for the purpose of more fully acquiring accurate and reliable data and information has personally visited the leading centres of insurance activity in both countries.

Carefully prepared reports and statements have from time to time been submitted to your committee, and considered by them in relation to the work in hand, and at the March meeting of the Executive Council the committee presented a unanimous finding that a system of mutual fire insurance applied to manufacturing risks, if organized on correct plans, and with a due regard to the limitation of the expense of management, would offer to a large number of members fire insurance adequately secured at actual and reasonable cost.

The report presented to the same meeting further suggested that the Council endorse the organization of the following companies under the condition outlined therein as follows:

1st. A mutual company in Toronto, on the lines of the New England Mutuals, for the purpose of underwriting such amounts as may be found practicable on risks in Canada now or hereafter to be insured in the senior or junior mutuals.

2nd. A mutual company in each of the cities of Toronto and Montreal for the purpose of underwriting amounts on substandard risks, on the lines of the companies forming the National Association of Factory Mutuals.

"This committee is of the opinion that such companies should be organized, and that members of the Association should assist in their organization, but that they should not be in any way connected with or controlled by the Association. Nevertheless, the services of the manager of the Insurance Department should be available to them, in an advisory capacity only, until the companies are fully organized."

The Council thereupon passed the following resolution:

"That the Executive Council having heard the report of the Insurance Committee and the resolution of the Montreal Executive thereupon, heartily endorse the organization of mutual fire insurance companies on the general lines therein suggested; and

"That while it must be clearly understood that

such mutual fire companies must be apart from and altogether independent of the Association, they endorse the view of the Insurance Committee that such companies will be of material benefit to those members whose risks are eligible for insurance therein, and that the general effect will be for the betterment of fire isurance conditions; and

"That by this resolution the Council do not endorse any definite plan or scheme of mutual fire insurance, but merely approve the general principle as referred to in the committee's report, and ask to be advised from time to time of the progress being made with such organizations;

"Further, on the plans proposed being approved by the Council, they will lend their assistance and co-operation in securing any needed legislation to bring the same into effect."

In order to ascertain who were desirous of participating in the formation of mutual fire insurance companies the action of the Council was communicated to all the members on June 15th, and this was accompanied by a form of agreement, pledging support to the companies if the plan of organization, rates and general conditions, were satisfactory to and approved by the subscriber.

Favorable Support of Members to Mutual Fire Insurance.

The replies received to this communication may be thus summarized:

301 return agreements duly signed promising definite support to the proposed companies in sums varying from $1,000 to $100,000.

34 write approving the formation of the companies, and promising full support when organized if conditions are satisfactory.

7 write discouraging the formation of the proposed companies.

The 301 members sending definite agreements promise an aggregate insurance in each of the two companies of $2,371,000, of which about $1,250,000 will be available at the outset. Adding support from the members who have written, but who have not signed definite agreements, it is quite apparent that the two proposed companies will have at inception a minimum available insurance of at least $1,500,000 in each company, or three times the sum upon which it was thought the companies might safely commence operations.

The committee could not but regard this result as most gratifying, and as indicating a general desire that the organization of the companies should be proceeded with. In accordance with the understanding the signers of the agreements, and those who have written general letters of approval unaccompanied by the signed agreement, were called together on the first day of this Convention, and the result of the meeting will be duly reported to the Executive Council at the next and subsequent meetings.

The work of the Insurance Department in respect to what may be termed the sub-standard mutual companies may now be regarded as closed, and the committee can only express the hope that results will fully justify the time that has been spent in laying the foundation of a mutual fire insurance system which will have an important and far-reaching influence upon the fire insurance business as it pertains to the manufacturers of the Dominion.

Future of the Department.

The Insurance Department has now, as a result of prolonged and exhaustive investigation, recommended the adoption of a course that will relieve it of further work along those lines, and, having been denied the right to place business with the companies forming the Canadian Fire Underwriters' Association, the plans of the Department must necessarily be varied from the lines upon which it was originally constituted, but it is impossible in this report to indicate the precise nature of the changes that must ensue as the result of the altered conditions.

The Insurance Committee, after an experience of eighteen months, unhesitatingly declare that the Department is a valuable, if not necessary, addition to the services the Association is in so many ways rendering to the members. The record of the work performed by the Department, as shown herein, leaves no room for doubt but that each succeeding year will demonstrate its advantages to an increasing number of the members. It will be borne in mind that much expense has been incurred and time occupied in the investigations that have ultimately resulted in the development of mutual insurance plans, and with the time that will now be available to the manager it is reasonable to expect that increased activity will follow in directions to which only limited time has been given in the past.

The committee, therefore, recommend that this meeting approve the continuance of the Insurance Department under plans to be approved by the Executive Council from time to time, and that the Finance Committee be authorized to provide whatever deficiency may arise in the expenses over the revenue of the Department under such limits and restrictions as it may deem advisable.

Finances.

The revenue of the Department for the year has fallen short of the expenses of the same period by $873.19, and in view of the large item of travelling expenses, and the volume of work incidental to the exhaustive investigations that have been carried on, the committee record their entire satisfaction and pleasure at the result.

There now stands at the debit of the Department in the treasurer's books a total sum of $1,675.61, made up as follows:

Preliminary expenses prior to organization of the Department	$ 238 98
Deficiency of 1905	563 44
Deficiency of 1906	873 19
	$1,675 61

Revision of the Dominion Insurance Act.

It is expected that the Insurance Act of Canada will be amended at the forthcoming session of Parliament, partly as a result of the Royal Commission on Insurance, and partly following the established custom of a decennial revision.

It is, therefore, recommended that the following resolution be endorsed by the Annual Convention, and that the Insurance Committee be charged with its presentation to the Government in due and proper form:

RESOLVED, that the Canadian Manufacturers' Association, in Annual Convention assembled, respectfully request the Government to add to or amend the Insurance Act of Canada in respect to the following matters:

(1) The incorporation and licensing of mutual fire insurance companies.

(2) The adoption of a fixed, definite and invariable standard insurance policy, protecting both the interests of the insurer and the insured.

(3) The regulation of the aggregate liability assumed by fire insurance companies in cities and towns so that in the event of large conflagrations the amount of such aggregate liability may be within the resources of the companies to discharge.

P. H. BURTON, Chairman. J. F. M. STEWART, Secretary.

E. P. HEATON, Manager Insurance Department.

Mr. Burton:—The most important feature of this report is that the work of the Committee during the year has led to a gatheirng of those interested in Mutual Fire Insurance Companies. Yesterday we had a very successful meeting, when preliminary organizations were completed. If members of the Association will kindly read over the report for themselves I think they will find that the result of our efforts since we have been appointed culminates, as far as we are concerned as a committee, in helping to get Mutual Fire Insurance Companies started, which will be entirely outside the control of the Association. That is to say it was felt that the Association, as an Association, did not want to go into the insurance business; and the Committee did not want to throw away all the information they had gathered in the past year, but they wished to give it into the hands of interested parties who would



Mr. Chas. S. Meek,
(Stewart Howe & Meek Co., Limited)
Chairman, Reception and Membership Committee, 1906-1907

come together and form these Associations. The resolution with which the report concludes we should like to have considered. I beg leave to move the adoption of the report.

Mr. Dusseau:—I beg to second the adoption of the report.

Mr. Burton:—It is expected that the Insurance Act of Canada will be amended at the next session of Parliament, and the resolution previously referred to recommends certain amendments the Committee think it desirable to endeavor to obtain.

The President:—This is a very important report, and we should be glad to have your views. (Pause). As there is no discussion I presume it may be taken for granted that you consider the report entirely satisfactory.

The report was then unanimously adopted.

THE REPORT OF THE RECEPTION AND MEMBERSHIP COMMITTEE.

The report of the Reception and Membership Committee was the next order of business.

Your Reception and Membership Committee has held fourteen meetings during the year, and is pleased to report a satisfactory year's work.

At the first meeting of the committee steps were taken to secure a satisfactory list of manufacturers who were not connected with the Association for the purpose of organizing an effective campaign to increase the membership. This campaign has been carried out, and as a result we are able to report a membership of 2,104, a net increase of 265 over last year.

Since July 31st the Executive Council has approved of other applications, making the membership to-day 2,129.

The membership by Provinces compared with last year is as follows:

	1905.	1906.
Ontario	1,125	1,257
Quebec	479	554
Nova Scotia	93	93
British Columbia	65	69
Manitoba	35	77
New Brunswick	31	37
Saskatchewan / Alberta	7	14
Prince Edward Island	4	3
	1,839	2,104

The membership is divided as follows:

Class A—Members having under 100 employees	1,626
" B—Members having 100 or more employees	310
" C—Additional representatives from members	168
	2,104

Local Banquets.

The Branches of the Association have as usual been active in arranging social functions, Montreal and Toronto particularly so. The committee wishes to record its appreciation of the assistance rendered by members of the Association in London and Berlin in arranging successful Association banquets in their respective cities. At Berlin the guest of the evening was Mr. Alfred Mosely, M.P., England, and at London the Hon. Adam Beck, M.P.P., and Mr. E. E. A. DuVernet were entertained. The committee is of the opinion that such functions furnish an excellent opportunity for members of the Association to become acquainted with each other and familiar with the general work of the Association, and that as such they are to be encouraged.

The Association Crest.

The committee selected from a number of designs the one here shown as an Association crest, and from now on the same will be generally used on Association publications.

Branch Extension.

The Montreal Branch requested that its territorial limits be extended so as to include those members of the Association in the immediate vicinity of Montreal. This extension was approved of and has been acted upon.

Membership Qualification.

Your committee has during the year refused to recommend the acceptance of any application for membership which was not presented by a bona-fide manufacturer. While this course was upheld by the Council the committee would

recommend that the Association by-law governing active membership be amended so as to guard the membership even more strictly than heretofore, and an amendment to the By-Laws covering this will be presented to the Convention.

Western Excursion.

The Executive Council, acting in accordance with the expressed wish of the Quebec Annual Meeting, decided to hold this year's Convention in Winnipeg. Your Reception Committee at once recommended that an opportunity be given the members to go further West, and the excursion party now en route was organized. Negotiations with the railways were commenced by your committee as early as December, 1905, and have only recently been completed. It is hoped that the final arrangements will be found satisfactory.

Letters have been received from a large number of towns throughout the West, inviting the excursion party to visit them. Wherever possible the invitations have been accepted. It was with the greatest regret that a few had to be declined, particularly the urgent and repeated invitations of Brandon and Prince Albert.

The excursion should do much to strengthen the commercial ties between the East and the West, and should lead to a better understanding of what our great Dominion will require for its future development.

Annual Meeting.

The arrangements for the Winnipeg Convention were carried out by your committee. In this work we wish to acknowledge the great service rendered by the officers and members of the Manitoba Branch. Without their assistance it would have been most difficult to arrange for the comfort of the visitors in Winnipeg and for the business sessions of the Convention. The courtesies which have been extended, both public and private, and the social invitations and entertainment are most flattering. We trust that all Convention arrangements will meet with your entire approval.

All of which is submitted.

L. V. DUSSEAU, Chairman. J. F. M. STEWART, Secretary.

Mr. L. V. Dusseau:—Your Committee did the best they could to increase the membership and they have succeeded in doing so to satisfy at least our President. You will remember he said last year that the membership should be increased by one thousand. Unfortunately we could not find that number of manufacturers who were willing to join. However, by July 31st, we increased by 265 and since then have added 25 more, making a total of 290. I beg leave to move the adoption of the report.

Mr. A. Saunders seconded the motion.

The President:—I wish to tender my personal thanks to the Committee, who have secured the large number of new members reported. I put the new membership rather high, but in the Dominion there are fourteen thousand large and small manufacturers, and while we have a large membership, we still have ample opportunity to increase it, and under the leadership of Mr. Dusseau and your new President, whom you will shortly elect, you will doubtless get your thousand in another year.

Mr. Cockshutt:—I think the Committee have done very good service during the last year. We cannot appreciate too much the success of their arrangements for this convention.

The report was adopted.

THE REPORT OF THE INDUSTRIAL CANADA COMMITTEE.

In the absence of Mr. T. A. Russell, Chairman of the Industrial Canada Committee, the General Secretary read the report of that Committee.

The committee in charge of INDUSTRIAL CANADA have pleasure in reporting a year of unusual activity and progress. Eleven well-attended meetings have been held and a close watch has been kept over matters affecting the Association's official organ.

Financial.

In view of the fact that last year's statement showed a deficit of $1,067.85 on account of INDUSTRIAL CANADA, a determined effort has been made to place the paper on a self-sustaining basis. To this end monthly statements have been called for, showing not only the actual receipts and disbursements, but the cost of production and earnings of each individual issue. These statements have been closely scrutinized. Where an opportunity to economize has presented itself your committee has been prompt to take advantage of it. Considerable saving has been effected first, by calling for new tenders for paper and printing; and secondly, by engaging the advertising manager on salary and commission instead of on a straight commission basis. At the same time the earning powers of the paper have been stimulated by the renewal at advanced rates of advertising contracts made under the old schedule, by the large number of contracts secured from new advertisers, and by the steady expansion of the paid circulation. It is gratifying to be able to report that the year's business shows a surplus of $1,259.17 after making ample allowance for bad and doubtful debts.



MR. GEO. BRIGDEN
(Toronto Engraving Co.)
Chairman, "Industrial Canada" Committee, 1906-1907

Typographical and Mechanical.

A large number of important changes have been made during the year in the appearance and arrangement of

INDUSTRIAL CANADA. Commencing with the issue of September, 1905, a new cover design was adopted, which permitted of varying color effects and changes of illustration, thus making the paper outwardly more attractive. In February the Association news was transferred from a position following the editorials to a colored supplement at the back in order that it might be reported more in detail and displayed more conspicuously. In April the card advertisements were also transferred to the back of the book, having first been made uniform as regards type arrangement. The place formerly occupied by them has been given over to display advertising. These changes have not only added to the appearance of the paper, but have proved highly acceptable to the advertisers, who now have a higher idea of the value of your paper as an advertising medium than ever before.

Literary.

Side by side with these changes an effort has been made to improve the reading matter of INDUSTRIAL CANADA. It was believed that by enlarging the paper and including in it each month a number of special articles on live topics it could be made to appeal more widely to the business men of the Dominion. Accordingly, as the revenue increased it has been the policy of your committee to procure more articles on subjects of business interest from able and well-qualified writers. This plan was begun in February, since when articles have appeared on Forestry, Advertising, Economy in Manufacturing, Western Irrigation, the Quebec Bridge, the Canadian Coal Industry, System in the Postal Service, Electric Smelting, Chemical Industries of British Columbia, Canadian Nickel Industry, Canadian Immigration, Railroad Construction in the West, Industrial Alcohol, Salmon Canning Industry in British Columbia, besides articles of timely interest on Transportation and Insurance questions. In May the report of the Ontario Power Commission was published in full, and we refer with no little pride to the fact that the business men of Canada, who are most vitally interested in the power problem, were given this report through INDUSTRIAL CANADA a full month before it was accessible in any other way.

It is believed that this policy will commend itself to members of the Association, for not only is it a means of giving them a more readable journal, but it is cultivating a valuable asset for the Association and adding greatly to the Association's influence and prestige.

Size and Circulation.

The steady growth in pages of the average monthly issue continues to be one of the statistical features of INDUSTRIAL CANADA'S career. The volume just closed contained in all 850 pages, of which 132 were used for the special Convention number. Leaving this latter out of consideration, the average size of the regular monthly issue was 65 pages as against 57 in 1905. The gross circulation for the past year was 53,300, or an average of 4,440 per month.

British Advertising.

A subject that has come up for frequent consideration by your committee is the advisability of accepting British advertisements in INDUSTRIAL CANADA. From a financial standpoint the advantage of such a proposal is obvious, for the British field could be cultivated at considerable profit, and the increased revenue used to improve the paper in other ways. At the same time it must not be forgotten that INDUSTRIAL CANADA occupies a unique position in Canadian journalism by virtue of its refusal to accept British and foreign advertising, and its departure from this principle might rob it of one of its chief attractions from the Canadian advertiser's point of view.

The committee would be glad to have an expression of opinion from the Annual Meeting as to whether the Association is or is not in favor of soliciting British advertising.

Other matters your committee have pleasure in reporting are:

(1) The satisfactory examination of our mailing sheets by the Post Office Inspector.

(2) The registration of the name INDUSTRIAL CANADA as a specific trade mark, thus preventing any other publisher from making use of the same.

(3) The appointment of Mr. F. P. Megan as Editor, vice Mr. G. M. Murray, appointed Assistant Secretary.

The committee in accepting the resignation of Mr. Murray did so with regret, as many of the improvements in the paper can be attributed directly to him. Mr. Megan has had considerable experience in trade paper publishing, and the committee believe the work has been placed in good hands.

All of which is respectfully submitted.

T. A. RUSSELL, Chairman — J. F. M. STEWART, Secretary.

The Secretary introduced the subject of the acceptance of advertisements from British firms. After some discussion, during which it was shown that "Industrial Canada" was in a good financial position now, it was decided to reserve the advertising pages for Canadian firms.

Mr. Watts moved, and Mr. Tindall seconded the adoption of the report.

The Secretary:—Ballots for the election of officers and committees are obtainable in the Secretary's office and must be returned by six o'clock in the evening.

Mr. Tindall:—I wish an agitation would be set on foot for the practical training of men for all practical positions. As a manufacturer, my difficulty is to get skilled mechanics. As it is boys are apprenticed and allowed to run from one shop to another before they finish, instead of being drilled and educated in one establishment. I think the matter should be taken up and the question dealt with in the near future.

The Convention adjourned at 11.35 until 2 o'clock.

At 2 o'clock the President called the members to order and the work of the Convention was resumed.

Mr. T. L. Moffatt asked permission to speak on the subject of British advertising. He strongly favored accepting advertisements from any British source.

The President:—I understand you were not present when this report was under discussion. You understand that the report was read and adopted this morning and I suppose it will be for the Chair to rule. There was an expression of opinion in reference to advertising British goods. It is not because we are not thoroughly British and believe in preference in the Empire. We are not looking at it from that point of view, but because "Industrial Canada," being the official organ of the Association, only carries advertisements for goods made in Canada.

REPORT OF THE RAILWAY AND TRANSPORTATION COMMITTEE.

Mr. Hugh Blain presented the report of the Railway and Transportation Committee.

The Railway and Transportation Committee respectfully submits the following report.

The year has been one of unusual activity, owing to the extended hearings of complaints by the Railway Commission in which the Association and its members were vitally interested. Some of these matters are still pending before the Commission, but the decisions which have been given have been such as to justify the Association in taking action.

The Department has continued to render assistance wherever possible to individual members in adjusting their difficulties with railway companies. Where the matter at issue was one involving a principle or the interest of a number of the members the Department has negotiated direct with the railway companies for the purpose of ameliorating the conditions complained of. In no case has a complaint been taken to the Railway Commission until exhaustive negotiations with the railway companies have failed to result in a satisfactory adjustment.

Demurrage.

Since the presentation of our last report, in consequence of the complaint made by the Association the Railway Commission has promulgated a new set of rules covering the application of car service and demurrage charges. These rules are practically along the lines of the draft agreed upon by the representatives of the Association and the railways, and are considered by your committee to fairly provide for the various difficulties reported to the Association and covered by our complaint. The time for unloading coal, coke and lime in bulk and for loading and unloading lumber has been extended; an additional twenty-four hours is allowed for freight having to be cleared through Customs; car service charges cannot be collected when Customs officials are responsible for delays; notice of arrival is now compulsory unless waived by consignee, provision being made for the lapse of time in transmitting notice through mails. The time for loading and unloading is changed so that when cars are not placed at 11 a.m. free time does not commence until following morning; when cars are placed before 11 a.m., the free time does not commence until 1 p.m. Inclement weather conditions and bunching of cars in transit by railways are covered by rules, which provide for the extension of the unloading time without collection of demurrage charges.

A memorandum from the Railway Commission, which accompanied the rules when issued, states, among other things, that the rules are looked upon as provisional. The Commission recognized the difficulty of framing rules to cover all contingencies, and asks that those adopted be given a fair trial. Careful attention is promised to any material representations respecting them which any party might desire to make. The regulations became effective on the 1st of March.

Owing to the importance of the matter your committee distributed the rules in pamphlet form to the members of the Association, with an explanatory circular, in which the members were invited to report any difficulties to the Transportation Department in order that they might be properly classified and forwarded to the Railway Commission for attention. Since that time certain difficulties have been reported by members, and these have for the most part been adjusted through the offices of the Association with the manager of the Car Service Bureau. An application from the tanners for an extension in the time allowed for loading and unloading tan bark has been forwarded to the Railway Commission for consideration.

Reciprocal Demurrage.

It will be remembered that the Transportation Department discussed with the Commission the question of adopting reciprocal demurrage charges against railways for failure to supply cars, transport freight in carloads, and deliver the same within a stated reasonable time. The Commission was also asked to consider the advisability of authorizing a so-called average arrangement for computing charges for detention to freight equipment. In its memorandum the Commission states that the subject of reciprocal demurrage requires more investigation and consideration than has yet been given to it, but with respect to the average arrangement it does not think there are many cases in which this would really be of any great advantage, and apprehends that any such advantage would be more than compensated for by complications and grounds for dispute. Your committee has not taken any further action respecting these phases of the demurrage question.



A Glimpse of Portage Avenue, the Leading Retail Business Street in Winnipeg

Classification.

The complaint to the Railway Commission, referred to in the last annual report, respecting the rules of the Canadian Freight Classification, has resulted in a number of modifications which will be of material benefit. The Association's complaint dealt with the rules of the classification

with regard to (1) minimum weights for long cars in excess of the standard; (2) mixed carloads; (3) minimum charge for single articles too long for box cars and requiring platform cars for carriage; (4) goods classified to be carried at owner's risk and released, and (5) the minimum charge for single shipments, commonly known as smalls.

Before the time set for a hearing by the Commission the railways signified their willingness to confer with the Association's representative for the purpose of adjusting the classification differences except that relating to mixed carloads.

At sittings of the Commission in the Western Provinces considerable opposition on the part of merchants and dealers developed to the extension of the rule of the classification covering mixed carloads, and as a result of subsequent conferences the mixed carload matter was placed with the others to be adjusted by mutual agreement with the railways. The amendments to the classification which followed these conferences, and as approved by the Commission, include a completely revised scale of minimum weights for freight loaded in cars in excess of the standard length, giving reductions all along the line. The rule respecting shipment of mixed carloads was extended so as to practically cover the grievances of our members who were unable to combine the products of their factories in carloads at a carload rate; the rule respecting minimum charge for single articles on flat cars was modified by reducing the minimum from 6,000 pounds to 4,000 pounds for boilers, smokestacks, structural iron beams, columns, girders and shafting, and for all other articles the minimum was reduced from 6,000 pounds to 5,000 pounds.

Rule 7, dealing with articles classified to be carried at owner's risk, was subject to extensive revision and modification. It was agreed to strike the term, "Owner's Risk," out of the classification as against over 250 items. Wherever left it is to be defined as covering one of the following:

Breakage,	Loss,
Chafing,	Sifting,
Damage,	Leakage,
Deterioration,	Weather.
Fire,	

Formerly the blanket term, "Owner's Risk," was used, and included everything. The rule as revised is to distinctly state that owner's risk is only of loss or injury resulting from the ordinary handling necessarily incident to the carriage of the goods. Whenever loss or injury results from carelessness or want of skill the railways are responsible. In dealing with this clause the railways refused to remove the stipulation, "Owner's Risk of Breakage," as against articles of glass. From agricultural implements and machinery they agreed to remove the owner's risk stipulation where the goods were boxed, but when not so packed they insisted upon the retention of owner's risk of chafing and breakage. Furniture when boxed is to be taken at carrier's risk, but where the same rate is given for furniture boxed or crated the condition, owner's risk of chafing and breakage, applies only to the crated parcel. Where articles are given a higher rating in crates and bundles than for boxes the owner's risk stipulation is to be waived. Liquids in glass, when packed, except acids, are to be carried without owner's risk conditions.

Wherever the classification rating applies to goods at owner's risk, and the forwarder desires them transported at carrier's risk, the increase in rate, heretofore 50 per cent., will be reduced to 25 per cent., thus making the increase about one class higher than the owner's risk classification.

The amendments to the classification necessary to give effect to these modifications were so extensive that the railways have undertaken a complete revision of the book. This work is now in progress.

The conferences did not result in any alteration of the rule relating to the charge for the carriage of small shipments.

Individual Classification Ratings.

In addition to the rules of the classification above dealt with there have been a number of changes in the ratings for individual articles. Most of these changes represent reductions resulting from the efforts of the Department.

In a supplement to the classification submitted to the Commission in November last it was proposed by the railways to increase the classification rating for heavy forgings in less than carloads from fourth to third class, and the minimum weight for machinery in carloads from 20,000 pounds to 24,000 pounds. These increases were reported by the Department to the interested manufacturers, and on account of their objections a protest was sent to the Commission, and after a hearing of the evidence the proposed increases were not allowed. Other proposed increases have been protested against. Some of these have not been allowed and others are still under advisement by the companies.

The following reductions in classification were secured through direct negotiations with the railways.

The basis for classification of vehicles in less than carloads was completely revised and reductions made covering shipments of about 75 per cent. of the vehicles.

Rating for hall seats and settees was reduced from double first class to first class.

The rating for cream separators in less than carload was reduced from first and one-half class to second class.

The rating for skiffs and rowboats was changed from an estimated to an actual weight basis and a modification in the rating secured.

Rating for Rockingham yellowware and earthenware in less than carloads in the territory east of Port Arthur was reduced from third to fourth class basis.

Rating for plate and mirror glass in box cars was changed so as to cover shipments of not over ten united feet at the first class rate when released.

Rating for cast iron pipe in carloads was changed so as to permit of the inclusion of four-inch pipe at seventh class rates.

The rating for varnishes and japan dryers has been reduced from first L.C.L., third C.L. in cans, and second L.C.L., fourth C.L. in barrels to the basis of third L.C.L. and fifth C.L. in both styles of package. This also permits the mixing of paints and varnishes in cars at fifth class.

Rating for small showcases under three feet was reduced from three times first class to double first class.

Small forgings, rating 1½ class L.C.L., were reduced to first class.

Creosote stains were added to the classification on the same basis as paints, third class L.C.L. and fifth class C.L.

Provision was made for the inclusion of iron pumps and parts with machinery in mixed carloads at a fifth class basis.

Evaporated apples in bags, formerly rating L.C.L. second, were reduced to third class, the same as in barrels.

Transcontinental Rates.

The complaint of the Association respecting rates on traffic from Eastern Canada to North Pacific Coast terminal points was restated to the Railway Commission in Vancouver last September. The discrimination complained of results from the charging of higher rates from Eastern Canadian

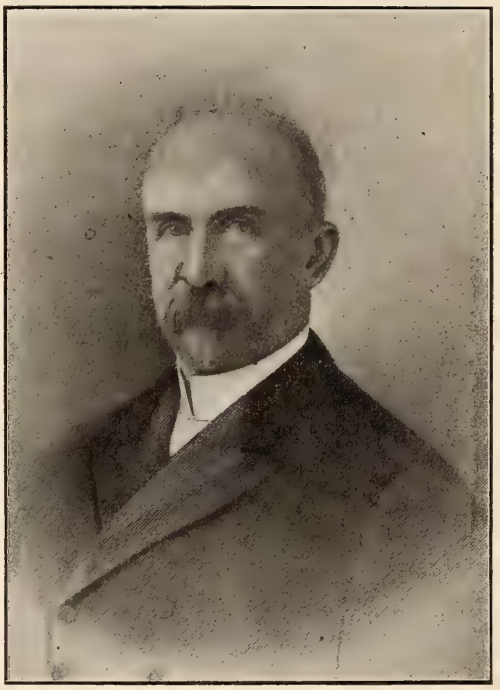
points than from the adjoining United States territory, although the traffic is hauled over the Canadian line through to destination. The difference against Canadian shipping points ranges from 20 cents on the first class to 8 cents on the tenth class, and the discrimination, when compared with shipments from eastern United States to Seattle and other Pacific Coast cities in the United States, is increased by five cents per 100 pounds on all traffic by adding a so-called "British Columbia terminal" arbitrary rate.

The answer to the complaint was filed by the Canadian Pacific Railway in March last, and alleges that the rates from United States points are accounted for by water and other competitive conditions, are made by United States lines beyond the control of the Canadian company, and that the competitive conditions which regulate the rates do not apply to shipments from Canadian territory which cannot be sent by water, and are not subject to the same railway competition. It is alleged further that the Canadian railway in taking business from United States points is compelled to accept the traffic at such rates as are available by United States lines. In doing so it claims to furnish a tonnage for cars which would otherwise move West empty, and this, it alleges, does not in any way disadvantage Canadian shippers, as the traffic would move in any event, whether hauled by the Canadian Pacific or not. The higher rates from Eastern Canada are alleged to be fair and reasonable. A statement of goods imported into British Columbia from the United States was filed, and after deducting imports from California and other Pacific Coast territory it was claimed that the figures indicated United States manufacturers were marketing less than 10 per cent. of the amount shipped from Eastern Canada to British Columbia points. This was cited as an indication that the Eastern Canadian manufacturer is not injured by the rate discrimination. The railway also claimed that its earnings were less than those of other transcontinental railways, while the cost of operating the line was greater owing to physical disadvantages and engineering difficulties.

A hearing was held at Ottawa in March extending over several days at which the arguments of the railway were answered on behalf of the Association by the manager of the Department. It was pointed out that the present system of rates was not entirely due to water competitive conditions, but rather from the agreements entered into by the interested all-rail carriers. The rates from United States points east of the 97th meridian were shown to be practically the same, regardless of competitive conditions, whereas the rates from all Canadian points, whether intermediate or otherwise, were higher by the amounts stated above. While competitive conditions appear to have some regulating effect upon the rates from United States territory, the railways seem to be able to stifle competition as affecting Canadian traffic, because, while rates from Canadian points were formerly related to the rates from the adjacent United States, they are now higher, whether traffic is shipped by way of Chicago or by the all-Canadian routes.

It was admitted that the Canadian manufacturers were doing the major portion of the business of British Columbia, but it was apparent that wherever they were called upon to sell in competition with United States shippers they had to equalize the difference in freight rates by adjusting their prices to cover the discrimination. The explanation of the ability of the Canadian manufacturer to do business and pay higher freight rates was found in the existence of the Customs tariff. Without the duty it would be impossible for him to enter the market at all, owing to the lower freight rates charged his competitor from the United States.

The Commission has recently issued an order in the case, doing away with the discriminating toll of five cents per hundred pounds added for British Columbia terminal, and modifying to some extent the rules relating to minimum weights for large cars and allowances for dunnage. The main portion of the discrimination resulting from the additional rates from Eastern Canada over Eastern United States has not been disturbed, the Commission holding that for the distance hauled and character of the service performed the domestic rates are not unreasonable, and that the lower rates of the United States lines are due to competition via Panama and Cape Horn, which does not affect traffic from Eastern Canada; and furthermore, that the carriage of traffic from United States points by the Canadian line at the reduced rates enables it to increase the volume of traffic and improve the service for the Canadian shipper.



MR. J. H. HOUSSER
(The Massey-Harris Co., Limited)
Chairman, Railway and Transportation Committee, 1906-1907

Discrimination in Favor of United States.

A number of complaints were received from Western Ontario manufacturers that rates, particularly to Eastern Canadian points, were higher than from adjacent and even more distant territories in the United States. The complaints were fully confirmed by investigations of the Department, and were finally brought to the notice of the Railway Commission through complaints by the Kerr Engine Co., Walkerville; the Standard Paint and Varnish Works, Windsor; the Walkerville Brewing Co., Walkerville, and the Wm. Gray & Sons Co., Chatham. At the hearings by the Commission the manager of the Department attended on behalf of the Association to assist in the presentation of the cases, and the final argument at Ottawa was entirely undertaken by him. The discriminations were not denied by the railways, but were claimed to be neither unjust or unreasonable. The higher rates from the intermediate Canadian points were justified on the ground of sparse population, climatic conditions, volume of traffic, and railway earnings per mile of line. The

principle involved was admittedly one underlying the system of rates at all frontier points, and on this account the cases under discussion were looked upon by the railways as of the highest importance.

The result of these complaints has been the issue of a memorandum by the Commission in which the complainants are sustained. The railways have been given ninety days to submit for the consideration of the Commission a scheme to overcome the discrimination. Various rumors came to the notice of the Department that it was the intention of the Canadian railways to negotiate with the United States lines for an increase in rates from United States points into Canada so as to technically escape the charge of violating the long and short haul clause of the Act, and at the same time avoid the necessity for any reductions in rates in Canada. In view of the persistency of these rumors a protest was sent to the Commission on behalf of the Association against the acceptance of such an adjustment as appeared to be contemplated by the railways. The Commission was informed that in the opinion of the Association the time had passed for increasing freight rates to or within the older Provinces of Canada, and that the shipping public generally were looking for reductions rather than increases in freight rates to result from the complaints under investigation by the Commission. The time allowed the railways has not yet expired.

Relief Suggested.

In dealing with these cases of discrimination in favor of United States and against Canadian shippers your committee has been impressed with the fact that, notwithstanding all the ingenious arguments put forward by the railways respecting difference in population, climate, cost of operating, density of traffic and railway competitive conditions, if it were not for the Canadian Customs tariff the railways could not maintain their present discriminatory freight charges. Your committee, after consideration, has decided to recommend to the Convention a resolution urging the Government to amend the Railway Act so as to forbid discriminations in freight rates in favor of the United States. The resolution is as follows:

WHEREAS, the Canadian railways are taking advantage of the Canadian Customs tariff for the purpose of charging higher freight rates upon traffic shipped from Canadian points than they charge upon the same traffic conveyed from the more distant points in the United States over the same lines to the same destinations;

AND WHEREAS, the railways are at the present time by their discriminations in freight rates either securing to themselves the benefit of the Canadian Customs tariff which is designed to develop the industries of Canada, or are assisting United States manufacturers to take business away from Canadian manufacturers;

THEREFORE BE IT RESOLVED, that the Dominion Government be petitioned to amend the Railway Act of Canada so as to prevent any railway from charging higher freight rates for the carriage of domestic traffic between points in Canada than charged for the carriage of the like description of traffic when hauled from equi-distant or more distant points in the United States and passing over the same lines in Canada to the same points of destination.

Decisions by Railway Commission.

Interswitching. — The application for interswitching facilities in the town of Lindsay, which was reported as pending at the last Annual Meeting, has been decided by the Commission in the same terms as those announced in the London interswitching case. The result is that traffic is placed on the sidings of either company in the town of Lindsay without any charge in addition to the regular freight tolls.

The Railway Commission has granted leave to the Grand Trunk Railway to appeal from its decision in the London interswitching case, the points upon which the appeal was taken being the jurisdiction of the Commission over local terminals and the question of remuneration or compensation to be allowed one railway for the use of its lines and facilities by another company. The appeal was set down for hearing at the last session of the Supreme Court, but was postponed.

Rates on Export Traffic to Atlantic Seaboard.—The decision of the Commission reported to the last Convention was supplemented by a further order modifying the rates on traffic exported via the ports of New York, Philadelphia and Baltimore. The modification was authorized after hearing the views of the interested railways, who intimated that the losses through reduction in rates to these points would fall almost entirely upon the Canadian railways and involve unreasonable diminution of their profits. A communication from the Secretary of the Commission intimated that the Board has considered it reasonable to adopt the changes announced, but if upon their full purport being made known and considered, and either the railways or shipping public desired a variation the Board would be pleased to hear them and give the subject further consideration.

The railways have made an application to have the case reopened for the purpose, if possible, of having the orders rescinded. The Commission has not yet signified its intention of granting the rehearing.

Metallic Roofing Company's Case.—This complaint was reported to the last Annual Meeting as pending before the Commission. The decision was issued last September, and required the railways to establish commodity tariffs, giving rates on metallic shingles and sidings in carloads equal to the rates at which they were carried before the change of classification in 1901. Immediately following this decision the railways increased the minimum carload weight from 24,000 pounds to 30,000 pounds. This had the effect of minimizing the reduction ordered by the Commission, and made necessary a further application for an order respecting the minimum weight. After further argument a supplementary order was issued placing the minimum weight in the territory west of Winnipeg at 24,000 pounds, and in the territory Winnipeg and east, 30,000 pounds per car.

Stauntons' Complaint.—This complaint dealt with an increase in freight rates on wall paper from Toronto east-bound. The rates on paper east-bound for many years past have been the same as in the west-bound direction. An increase was made on the 15th of November last, and after extended negotiations the railways refused to restore the former figures. The question was dealt with at a public hearing by the Commission, and subsequently an order was issued requiring the restoration of the former rates.

Davies' Case.—The complaint of the Wm. Davies Company, Limited, of the rates on packing house products for export from Toronto to Montreal was heard by the Commission, the Department assisting at the presentation of the case. The decision of the Commission required a reduction in the rate from 19 cents to 18 cents per 100 pounds, and relative reductions were ordered from all other manufacturing points in Ontario.

Matters Pending Before the Railway Commission.

Canadian Salt Company's Case.—The complaint of the Canadian Salt Company is important in that it deals with the question as to whether the railway companies are en-

titled to exact a toll in addition to the regular freight charges for the placing of traffic upon sidings within terminals. The complaining company's premises are located upon a siding connecting with the Canadian Pacific Railway. As the railway's schedules are arranged at present they are unable to make shipments to points on the Grand Trunk except upon the payment of switching charges in addition to freight tolls. The ruling of the Commission in the London switching case requires the railways to place traffic within terminals without additional charge. The complaint was brought to the attention of the Commission, which has directed that the railways be required to provide a joint tariff to cover the through movement. If they fail to provide such tariff the Commission is to be asked to order the same. Application has been made for the necessary through tariff, but definite replies are not yet to hand.

Winnipeg Switching.—A request from the Manitoba Branch, complaining of certain charges assessed by the railways in Winnipeg in addition to the regular freight tolls, was brought to the attention of the Commission, and is now under advisement by that body.

Shed Storage Tariffs.—The shed storage tariffs in use on railways have been reissued, and now contain conditions by which it is intended to limit the responsibility of railways as insurers of property while in their possession. The railways arbitrarily limit their liability to a period of twenty-four hours after freight has been received at shipping points or unloaded at destination, whether consignee is advised or not. A communication has been sent to the Commission calling attention to these objectionable conditions, and asking if the Board will take action.

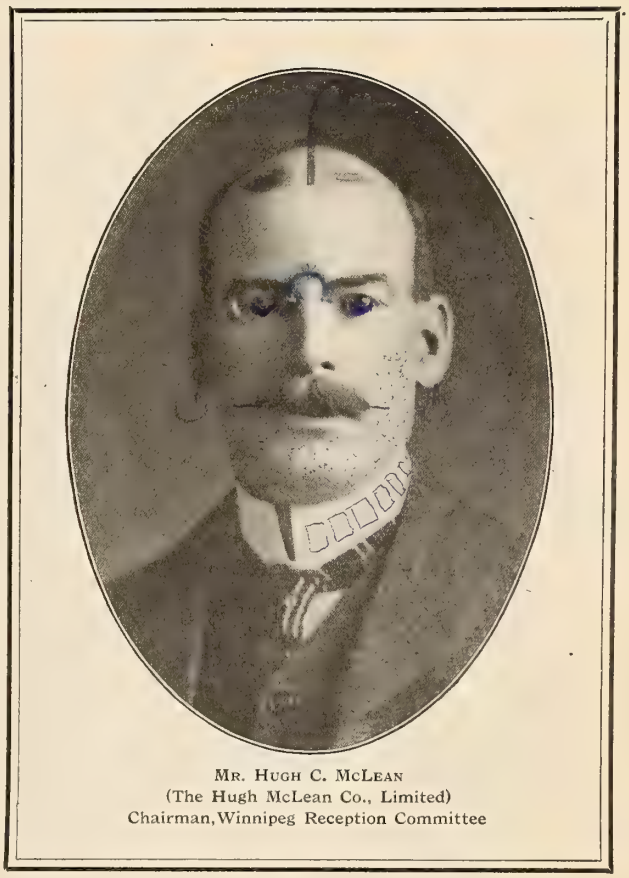
Amendments to the Railway Act.

The resolutions of the Quebec Convention respecting amendments to the Railway Act (1) for the purpose of making express companies subject to the Act, and (2) to provide for the establishment of transfer tracks for the interchange of freight at points served by two or more railways, if such tracks are not at present provided, were communicated to the Government. Later a deputation representing the Association waited upon the Minister of Railways and Canals to urge the introduction of legislation along the lines indicated. Your committee is pleased to report that amendments to the Act have been passed dealing with both these subjects. Express companies are made subject to the Railway Act in the matters of tolls and contracts for carriage, and are brought under the jurisdiction of the Railway Commission. Provision has also been made to overcome the deadlock which existed in the matter of securing interswitching arrangements where the railway companies refused to provide transfer tracks. By the amended legislation the Railway Commission is empowered to require the construction of such tracks where, in their opinion, they are necessary, upon application being made by the Boards of Trade, Shippers' Associations, or other interested parties.

Railway Traffic Forms.

The anticipated revision by the Commission of the forms of contract in use on railways has not yet taken place. This important matter has not been overlooked by your committee. On numerous occasions during the year the Transportation Department has urged upon the Commission the necessity of taking up this work. Advices now to hand indicate that the revision will be undertaken this autumn. In this connection your committee desires to mention that a number of instances have been reported to the Department during the year where railways have refused to pay the amount of losses arising from the destruction of property by fire while in their possession. The attitude of the railways seems to be that if the goods are destroyed while in transit they are protected by the condition on the back of the contract form, and if the goods are destroyed at the point of destination their responsibility is that of warehousemen only, and in this capacity they are not chargeable with loss resulting from fire unless negligence can be proved against them. There are other equally objectionable conditions included in the forms of contract in general use on railways by which the carrier's responsibility is unduly restricted.

The Railway Act requires the authorization and approval by the Commission of all contracts restricting or limiting liability of carriers. Your committee would respectfully urge this Convention to adopt a resolution in the following terms to be forwarded to the Minister of Railways and Canals and to the members of the Railway Commission:



MR. HUGH C. MCLEAN
(The Hugh McLean Co., Limited)
Chairman, Winnipeg Reception Committee

WHEREAS, the forms of shipping receipts and bills of lading in use on railways in Canada have been drawn in the form of special contracts for carriage containing terms and conditions prepared solely in the interests of the carriers;

AND WHEREAS, by the insertion of unreasonable and unjust conditions in such forms the railways are relieved of their liability as insurers of the safe carriage and delivery of property entrusted to them, thereby burdening the shipping public with the losses resulting from damage or injury to goods while in the possession of the carrier;

AND WHEREAS, it is impossible to secure transportation of goods by railway except under the special contract conditions so imposed by the railways, notwithstanding that the full legal rates of toll are charged;

AND WHEREAS, the Railway Act requires the authorization and approval of all traffic forms by the Railway Commission;

BE IT RESOLVED, that the Canadian Manufacturers' Association, in Convention assembled, respectfully petitions the Honorable the Board of Railway Commissioners for Canada to require the immediate revision of the forms of contract for carriage and other traffic forms in use on Canadian railways for the purpose of eliminating the unreasonable conditions now contained therein, and that the railways be required to accept traffic for transportation under a simple form of bill of lading which should be merely a receipt for the property, coupled with an agreement to carry and deliver the same to a specified destination, subject only to such restrictions and conditions as are established by common or statute law.

New Zealand Steamship Service.

Complaint was made to the committee regarding the steamship service between New Zealand and Canada, recently subsidized by the Dominion Government to the extent of $50,000. It is claimed that the steamers are not suitable for the trade, are not fitted with refrigerator or cool stowage accommodation to handle perishables; insurance is said to cost one-eighth higher than on the more modern ships of other routes, and, notwithstanding these disadvantages, it is stated the contractors are charging the same or higher rates than on mail steamers of other lines. It appears that the Canadian Government granted the subsidy at the urgent request of New Zealand through Sir Joseph Ward, who practically arranged the contract, the Canadian Government acquiescing in the terms thereof.

Investigations indicate that, while the complaint in the main is based on fact, the steamers appear to conform to the specifications as laid down in the contract.

Your committee is of the opinion that the interests of trade and commerce would be better served by the establishment of a steamship line between Australia, New Zealand and Canada via the Atlantic seaboard. A resolution embodying this view was approved by the Convention of the Association held at Montreal in 1901, and has been reaffirmed at subsequent conventions.

The following resolution is respectfully submitted:

RESOLVED, that in the opinion of the Association the Dominion Government should be again urged to take steps to establish a line of steamships to operate between eastern Canadian ports and Australia and New Zealand.

Other Matters Dealt With.

Aids to St. Lawrence Navigation.—The attention of the committee was directed by our President, Mr. C. C. Ballantyne, to the work being carried on by the Dominion Department of Marine and Fisheries toward the relighting and buoying of the St. Lawrence route and the Atlantic seaboard with the object of lessening the risks of navigation, decreasing the number of losses, and thereby directly affecting the rate of insurance to be paid by Canadian manufactured products exported to other countries. After consideration the committee felt that in the interests of Canada the improvements in the aids to navigation on the St. Lawrence should be carried on and completed as rapidly as possible in order that the lowest rates of insurance might be obtainable for products entering and leaving Canadian ports. A resolution submitted was approved by the Executive Council and forwarded to the Dominion Government expressing the appreciation of the efforts made by the Government, and urging that the improvements be carried to their logical conclusion with all possible speed.

Georgian Bay Ship Railway.—The assistance of your committee was solicited by the promoters in furthering a bill before Parliament relating to the suggested deep waterway and ship railway from Georgian Bay to Lake Ontario. The committee, after considering the subject, concluded that it would be inadvisable for the Association to express an opinion on the subject.

West India Steamship Service.—Reference was made in the last annual report to our recommendations to the Department of Trade and Commerce respecting improvements in the steamship service between Canada and the West Indies. Since then we are pleased to report that this service has been to some extent improved by cutting out some of the calls, thus effecting a reduction in the length of time occupied by the steamers in making the trip. A superior ship has also been put on the route.

Rates to Halifax on Export Traffic.—An application was received from the Board of Trade, Halifax, asking for the assistance of the Association in a proposed application to the Railway Commission for an order requiring the adoption of New York rates to traffic exported via Halifax, same as via St. John. After careful consideration your committee decided this was not a question in which the Association as a body could interest itself, and considered the question one which would be more properly taken up by the Intercolonial Railway or the Halifax Board of Trade direct.

Rates East-bound from Vancouver and Victoria.—Your committee had under consideration a recommendation from the British Columbia Branch that the manager of the Department be permitted to assist counsel for the Boards of Trade for Vancouver and Victoria in presenting their complaint before the Railway Commission of alleged discrimination in rates east-bound from Pacific Coast points to stations on the Canadian Pacific to and including Calgary and McLeod. After careful deliberation your committee concluded that it would be impossible to render assistance to the Pacific Coast cities without conflicting with the interests of members of the Association at Nelson, Calgary, Edmonton, Winnipeg, and other points.

Rates on Lumber from Pacific Coast.—A request was received from the British Columbia Branch that the Department should assist in the presentation of a complaint against advances in rates on certain lumber commodities east-bound. This was supplemented by a further request to allow the matter to remain in abeyance pending negotiations between the railway and interested shippers. The matter is, therefore, pending.

Staking Flat Cars for Lumber Shipments.—The suggestion for provision of stakes for flat and gondola cars for the carriage of lumber shipments is one of the important matters dealt with. At the present time the shippers are required to provide the necessary staking and other equipment to secure loads to the cars. This involves an enormous expense and waste, which could largely be overcome by the proper equipment of the cars by the railways. At a meeting of the Canadian Freight Association a number of those interested, including the manager of the Transportation Department, discussed the question with the railways, who have taken the matter under advisement. The question has also come before the Railway Commission, owing to a complaint by the Sarnia Bay Lumber, Timber and Salt Company. The same matter is under negotiation between the shippers and railways in the United States. The Canadian railways have asked that the matter be left in abeyance until a settlement is reached across the border, as, owing to the interchange of cars and commodities between the two countries, it is felt that whatever arrangement is come to by the United States railways will have to apply in Canada. The Commission has also decided to allow the matter to remain in abeyance pending the outcome of these negotiations.

Minimum Weights for Live Hogs.—Owing to complaints from interested curers of meats negotiations were opened by

the Department with the railways for the purpose of effecting an improvement in the minimum weights for live hogs in carloads. The practice is to charge a minimum of 20,000 pounds for single deck and 28,000 pounds for double deck cars of the standard length. The actual weights which can be loaded into the cars are much below these figures, and the consequence is the packers are required to pay for considerable weight which is never hauled. The result has been reductions of the minimum weights for single deck cars to 16,000 pounds and double deck cars to 24,000 pounds. This will effect a material saving in the cost of transporting the raw materials for these manufacturers.

Rates on Woolen Goods.—An application on behalf of the Woolen Section for restoration of the west-bound basis of rates upon their shipments in the west-bound direction was made, but failed to secure the favorable recognition of the railways. The matter is in abeyance pending the action by the Railway Commission in respect to the east and west-bound situation generally.

Coal Rates.—Communications having been received from the Galt and Guelph Boards of Trade and others respecting the arrangement of rates on coal from various Ontario gateways, the Department was instructed to investigate the subject. As a result of these investigations your committee decided that, owing to confliction of interests, any application for revision of the rates would be required to be dealt with locally.

Freight Service on Central Vermont.—On complaints from members located at points on the Central Vermont Railway in Canada of unsatisfactory freight service, communications were opened with the traffic manager of the railway line, and resulted in the establishment of a new system of marshalling freight trains so as to ensure despatch to all less than carload traffic.

The work of the Transportation Department, as was expected, has shown a decided increase from year to year. Daily enquiries are received from members in all parts of the country relating to transportation matters. Many difficulties relating to freight rates, classification and claims have been removed and adjusted through the efforts of the Department or as result of action recommended by it.



The Rotunda of the Royal Alexandra, the Headquarters of the Association in Winnipeg

Warehouse Site Leases.—Complaint from Manitoba members respecting the terms of the form of lease in use by the Canadian Pacific Railway for warehouse sites in Manitoba was investigated by the Department, but found to be beyond the jurisdiction of the Railway Act. The committee, however, acting with the Manitoba Branch, has been giving advice as to the most effective plan for securing relief.

Belanger's Complaint.—Complaint of A. Belanger, of Montmagny, Que., of excessive charges on agricultural implements was adjusted through the Railway Commission upon action taken under direction of the Department. The Railway insisted upon charging at estimated weights, but was ordered to weigh shipments and charge only at actual weights.

Minimum Weights of Tan Bark.—Complaint from the McQuay Tanning Company, of Owen Sound, of excessive minimum weights on tan bark was adjusted by negotiation with the Canadian Pacific, which made modifications in their special tariffs on tan bark to conform to the Canadian classification weights.

Early in the year Mr. J. O. Thorn resigned from membership on the committee. The committee appointed the following additional members: Mr. J. S. N. Dougall, Montreal; Hon. J. D. Rolland, Montreal; Mr. O. J. Donagh, Toronto; Mr. T. A. Staunton, Toronto.

Respectfully submitted,

R. HOBSON, Chairman. J. F. M. STEWART, Secretary.

J. R. MARLOW,
Manager Transportation Department.

Mr. Blain:—This, Mr. Chairman, is a very lengthy report and will probably provoke a good deal of discussion. I would suggest that we take up its clauses seriatim.

This was agreed to.

Mr. Blain:—I should like to say that the Manager of the Transportation Department has done a great deal of good work for the Association during the year. I doubt whether many of us thoroughly appreciate the amount of work done by Mr. Marlow. I have very great pleasure in testifying to his efficiency and energy.

The first clause in the report is that of demurrage. I would move the adoption of that clause.

This was carried as were also motions to adopt the next two clauses.

Mr. Blain:—I beg to move the adoption of the clause relating to Transcontinental Rates.

Mr. Marlow:—This is one of the earliest complaints of the Association brought before the Dominion Government and pressed on the attention of the Minister of Railways at the time the organization of a Railway Commision was being considered. It is one of the striking instances of railway discrimination between Canada and the United States. From all points in the United States east of the 97th meridian of longtitude right to the Atlantic coast rates to British Columbia terminals are lower than from any intermediate point in Canada, notwithstanding that the United States traffic is hauled through Canadian points from which the higher rates are charged. This was argued before the Railway Commission, which has recently issued its decision, but has not removed the discrimination complained of. The arguments of the railway as to competition seem to have been considered by the Railway Commission, but the argument of the manufacturers that the railway is simply taking advantage of the customs duty, appears not to have influenced the Commisioners sufficiently to cause them to make any pronouncement upon the point. As the discrimination has not yet been removed, we have suggested at the ninth page of this report a resolution which deals with the matter.

Mr. Blain:—The next clause refers to the discrimination in favor of the United States. The report contains a resolution dealing with a relief from this unfair treatment. I beg to move the adoption of the resolution.

This was carried.

Mr. Blain:—I beg to move the adoption of the clause "Decisions by Railway Commission."

This was carried.

Mr. Blain:—I beg to move the adoption of clause "Matters Pending Before the Railway Commission."

This was carried.

Mr. Blain:—The next clause refers to amendments of the Railway Act. In moving its adoption, I wish to tell the Association that in accordance with the resolutions passed at the last annual meeting, the Express Companies have been brought under the jurisdiction of the Railway Commission, and that very substantial progress has been made along these lines.

This clause was adopted.

Mr. Blain:—The next clause is "Railway Traffic Forms." This is a very important matter, and we have drawn up a resolution on the subject.

The resolution was adopted.

Rates to New Zealand.

Mr. Blain:—The next clause is "The New Zealand Steamship Service." I beg to move its adoption. In connection with this we have prepared a resolution urging the establishment of a steamship service between Eastern Canadian ports and Australia and New Zealand.

Mr. Saunders:—I have sent goods to Australia for a good many years via New York, and for the last four years I have taken advantage of the facilities offered by the C. P. R. The officials of that road tell me that the members of our Association have not taken advantage of the transportation facilities furnished by their Company. They say that if they received proper support from the manufacturers of this country they would be prepared to extend the service via Vancouver. Personally, I have received excellent rates to every part of New Zealand and Australia. While you are asking the Dominion Government to subsidize a steamship line from Eastern Canada, I fancy that we are not taking advantage of the service we now have with the C. P. R. If our members were to approach this Railway Company and present their requirements, I am sure additional service would be provided, say a semi-monthly sailing to Australia and New Zealand, with the best possible rates. I am shipping via Vancouver 25 per cent. lower than via New York.

Mr. Thorn:—Our experience has been practically opposite to that of Mr. Saunders. I think this has happened in this way. Mr. Saunders' goods are bulky in proportion to their weight, and ours are very heavy in proportion to their bulk. We are able to ship via New York at 25 per cent. less than via Vancouver, and we do it all along. I am sure we are all anxious to ship via Canadian ports, but on certain lines of goods it is impossible to ship via Vancouver owing to the rates being higher than via New York, although perhaps in other goods the rates are lower.

Mr. Henderson:—I can quite understand heavy goods not being shipped by Vancouver, but by New York. I know there is a large tonnage going to New Zealand via New York.

Mr. Saunders:—I am satisfied the members of the Association have not approached the C. P. R. in the proper manner. If they did they would get the proper rate by Vancouver. I ship cheaper by Vancouver than by New York.

The President:—I think we all agree in the desire to build up our Canadian ports, but the general opinion here seems to be that the rates of the C. P. R. are considerably higher than manufacturers in Canada pay who are shipping goods by United States ports. It is reasonable to suppose that this is so because of the long haul. Some years ago I enquired from the railways and there was no comparison between United States and Canadian rates. The United States rates were very much lower.

Mr. Wickett:—We ship both ways, but mostly by Vancouver.

Mr. Blain:—A great many enquiries on this subject have come to the Association during the year, and Mr. Marlow has had it under consideration for a considerable time. I think it would perhaps be well for him to give a word of explanation. I am sure he can place the matter before the convention clearly.

Mr. Marlow:—The difficulty in connection with the matter is that the C. P. R. who, as Mr. Saunders says, are anxious to handle all the traffic, are unable by reason of their long overland haul to meet the rates available by the regular lines plying from New York to Australia and New Zealand. The railway haul to the Atlantic seaboard is almost infinitesimal as compared with the haul to Vancouver. On articles in the higher classes the railway is able to meet the situation and takes goods at the same rates as via New York, but for heavy goods which move in large quantities, such as agricultural implements, the railway cannot meet New York rates. They do quote rates sufficiently low to encourage shipments by their line which require an ex-

press service and can afford to pay for it, but they admit their inability to meet via Vancouver route, which involves an overland haul of thousands of miles, the rates which are offered for practically all water carriage from New York. The object of the resolution is to retain in Canada the trade now lost to the United States carriers. We must use the Atlantic ports so long as the rates that way are so much lower, and the object of the Committee is to get a direct service from the eastern ports of Canada.

Mr. Saunders:—Would they establish two lines if they had not the traffic to carry?

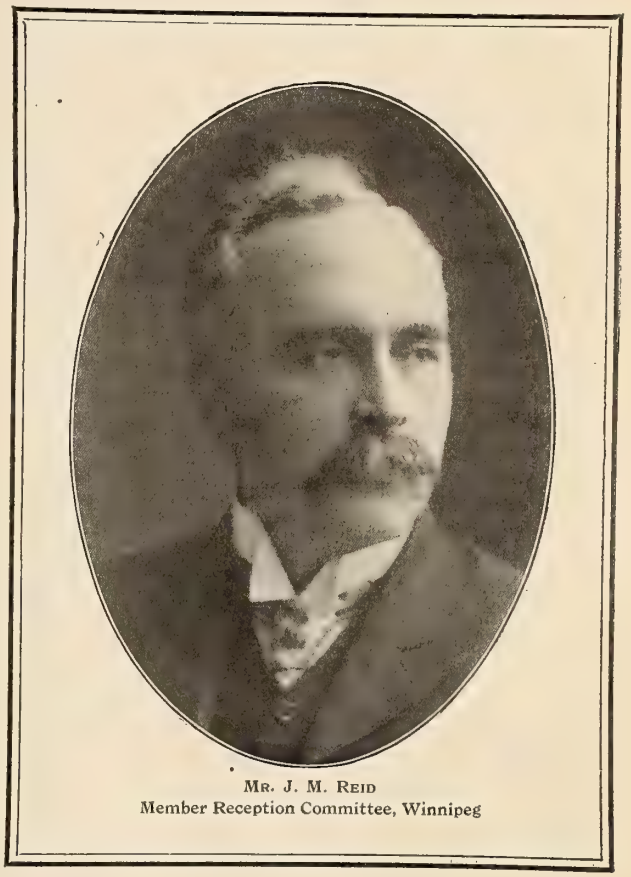
Mr. Marlow:—It is not a question of service nor which line is the best. It is simply a matter of low rates by a water route versus higher rates by a long rail and water route.

Mr. Saunders:—I am in touch with the officials of the C. P. R. and other railways, and if they were properly approached, they would be prepared to establish rates which would be in fact lower than by the New York route. I have authority for saying so. They claim themselves they have never been approached by the manufacturers of Canada as an Association, or even individually, sufficiently to warrant them in putting on a futher service, or in making a rate to compete with New York. They say they have all the traffic they can carry, but they would be willing to put on a further service to compete with New York, as soon as the manufacturers of Canada in a body approach them and offer traffic enough to warrant them doing so.

Mr. Thorn:—I think there is no question about there being sufficient traffic by any line. When I was Chairman of the Transportation Committee some years ago, we compiled information from reliable sources, showing the kind of traffic that was going via New York, and which might come very readily via the Canadian line, providing it ran from an eastern port. That information was published, I think, in "Industrial Canada." It is entirely out of the question to expect goods to be hauled across the Continent to Vancouver and then shipped to Australia and then New Zealand at the same rates charged via New York from points in the Eastern Provinces. The service to New Zealand via Vancouver will answer the purposes of traffic originating at certain points, but it cannot be expected to carry the traffic from the east of Lake Superior.

Mr. J. N. Shenstone:—The matter is a very important one to the manufacturers of Canada. It is also a very complicated one. The Massey-Harris Co. have used the C. P. R. just as often as they could, very often at a very much heavier expense than the service would have cost via New York. The trouble of the C. P. R. line is that it is an express line, and we have been able to use it, as other manufacturers would, for quick service, and would be willing to pay extra for that. In all my connection with that trade, we have never had as low a rate as via New York during 1905. At that time rates were very low; they are not so low now. In 1905 we used the Vancouver service to the extent of 75 to 100 carload lots. On all of this we had to pay increased tonnage. The Vancouver route only touched at one point in Australia and New Zealand, New Zealand being the last, so we did not gain much time. I think that shipments to Melbourne, Brisbane, Perth and Adelaide cannot be made with any economy by Vancouver on account of the arbitrary inland rates.

I think this resolution is in the right line. A line from an Eastern Canadian port carrying Canadian products if it was a line such as they run out of New York now, calling at all the points, not only in Australia, but also in New Zealand, would, I think, pay. Since the return freight from Australia to Canada is small, it would probably be necessary for the ships to make a triangular course, taking on a load of wool or hides in Australia for England, and bringing a shipment from England to Canada. It is only in that way the line could be made profitable. I believe if a line of steamships was run from a Canadian Atlantic port to call at all points in Australia, it would get all the freight it could carry. The New York rate always varies. The history of the New York freight is this: Two lines existed and cut the rates for a year or two and then amalgamated Another line was then started and cut rates on the amalgamated companies. This has been going on for the last 12 or 15 years. We have not been able to ship by one continuous line for more than three or four years at a time. The Canadian line would have two lines of competition from New York; one line has altogether United States capital, and the other is altogether British. They carry freight cheaply. Whether a Canadian line can be formed to carry freight in the same way is a question. It would be a three-cornered fight at a low rate. We want a line to compete on the Atlantic seaboard and I believe it would get a very great amount of freight from the United States.



MR. J. M. REID
Member Reception Committee, Winnipeg

Mr. C. H. Waterous:—We tried to get lines to ship via Vancouver and found it impossible.

The President:—It is quite evident that this resolution deals with a matter of great general interest. As it has been moved and seconded I shall ask you to vote now.

The resolution was carried.

Mr. Blain:—I beg to move the adoption of the report as a whole, and would like to repeat that we cannot appreciate too highly the services of the Manager of the Transportation Department. (Hear, hear).

Carried unanimously.

The report of the Commercial Intelligence Committee was then presented as follows:

REPORT OF THE COMMERCIAL INTELLIGENCE COMMITTEE.

Your Commercial Intelligence Committee begs to present its report covering the different subjects that have come under its attention at the nine meetings held during the past year.

Foreign Trade.

It is gratifying to note that Canada's foreign trade shows another remarkable increase during the year ending June 1906, particularly as regards export trade. Canada's imports increased in round figures $28,500,000, while its exports increased $64,600,000, reaching a sum of $255,500,000. The exports of manufactured goods, which classification in the Government Blue Books does not include such articles as sawn lumber, canned and cured meats and fish, cheese, flour and cereals, have increased from $21,200,000 to $24,560,000. or in the neighborhood of 16 per cent.

The Committee also note with satisfaction certain improvements in steamship service on both the east and the west coasts. The Trade and Commerce Department has continued the distribution of valuable commercial information by means of the Weekly Reports, and has extended its commercial agency system by establishing offices in China and Newfoundland, both of which should be of benefit to export trade. The correspondence carried on between the Department and British Consuls in the United States has resulted in a very satisfactory understanding to the effect that the Consuls are prepared to give their attention to Canadian enquiries.

Foreign Enquiries.

During the year under report we have received enquiries for Canadian goods from 436 foreign firms requesting information regarding 798 articles. In each instance the parties enquiring have been given the information requested and 1,653 enquiries have been forwarded to interested members of the Association.

In addition to this the Association has procured an increasingly large number of commercial reports on foreign firms and has translated more foreign correspondence than ever before.

Canadian Catalogues.

Following the suggestion of Mr. C. M. Kittson, Canadian Government Commercial Agent for South Africa, your Committee took steps to provide twelve of the Government Commercial Agents with sets of catalogues representative of the products of Canadian factories. Acting with the Department of Trade and Commerce the Association collected these catalogues, and a case containing a set of 160 has been sent to each agent. A case has also been forwarded to Mr. W. A. Burns, Canadian Commissioner to the Christchurch Exhibition, New Zealand.

Christchurch Exhibition.

The Association has been honored by having its Secretary appointed by the New Zealand Government as one of the Commissioners for Canada for the Christchurch, New Zealand, Exhibition. This Exhibition, which will be open for six months from November 1906 till April 1907 inclusive, has given to Canadian exporters a splendid opportunity to introduce their goods. The Canadian Government officially recognized the Exhibition and undertook to defray the cost of freight, space and maintenance on such exhibits as were suitable. The Association worked in close touch with the Exhibition Branch of the Department of Agriculture, and furnished full particulars to the manufacturers of Canada, whether they were members of the Association or not. Your Committee is glad to announce that 51 members of the Association will have exhibits in the Canadian Court, while a number more will be represented at the Exhibition by their New Zealand agents.

Japanese Tariff.

In 1903 the Association called the attention of the Dominion Government to a treaty existing between Japan and Great Britain, which gave to Great Britain certain advantages in the Japanese Customs tariff, which were not extended to this country. Canada was particularly handicapped in exporting such articles as leather and leather goods, condensed milk, live stock, cotton and woollen goods, paper, enamelware and rubber goods. Negotiations have been going on since the date mentioned between the Governments interested. In June 1905 the Canadian Government made a favorable announcement, but it was not till July of this year that the treaty became effective. Your Committee believe that the ratification of this treaty will tend to increase our exports to Japan very considerably.

Canadian Trade Index.

The Association has issued and distributed the fourth edition of the Canadian Trade Index. On account of the largely increased membership of the Association this Index contains much more information than any previous issue. The arrangement of matter on the page has been altered and the size of type reduced; as a result the general appearance of the book is considerably improved. The distribution of the Index has been carried out with the greatest care and the whole issue of ten thousand copies will be in the hands of interested parties at an early date. We are glad to be able to report that financially the Index has also been a success.

The Metric System.

The adoption of the Metric System of Weights and Measures is being very strongly advocated by certain organizations in Great Britain and the United States. In neither country, however, has it made much headway. In the United States the National Association of Manufacturers has absolutely opposed its adoption and has been successful in having a Congress Bill defeated. In Great Britain the views of those opposing the adoption of the system have found favor with the Government. In Canada there is no great interest taken in the subject. For some reason, however, the Dominion Government undertook to educate the people to an appreciation of the advantages claimed for the system and sent Prof. J. C. McLennan to lecture in many of the more important centres. The Association objected to the Government taking sides on such a doubtful question and asked to have Dr. McLennan's lectures discontinued. The subject is one which the Association will likely have to deal with some time in the future, and your Committee would suggest that the members individually give it their attention and estimate the advantages, cost and disadvantages which would result by a change from the present system.

The Executive Council put itself on record by a resolution as follows:—

> "That the Association request the Government not to take any action to encourage the adoption of the Metric System until such time as action is taken by the British Government."

Sixth Congress of Chambers of Commerce.

The Association was represented at the Sixth Congress of the Chambers of Commerce of the Empire, held in London in July, by Messrs. Geo. E. Drummond, P. H. Burton, R. J. Copeland, John Coates, and Harrison Watson. The meetings of the Congress were most successful and the subjects discussed very important.

The Association, as did five other Canadian bodies, forwarded a resolution having to do with Preferential Trade within the Empire. One of our representatives, Mr. Harrison Watson, suggested that a meeting of Canadian delegates should be held in London prior to the meeting of the Congress for the purpose of uniting on one resolution and having the same advocated from a Canadian rather than a local view point. This meeting was arranged by the Association and a single resolution was presented to the Congress by Mr. Geo. E. Drummond and passed by a good majority. It is encouraging to note that more British Chambers of Commerce put themselves on record as favoring the preferential principle than ever before.

Two other resolutions presented on behalf of the Association by Mr. P. H. Burton and Mr. R. J. Copeland, and having reference to the establishment within the Empire of uniform laws respecting Patents, Copyright and Insolvency, and the appointment of an Imperial Royal Commission to investigate, and, if possible, to recommend a uniform system of Weights, Measures and Currency for the Empire, were approved of.

Trinidad Parcel Post.

In three previous reports your Committee have had to refer to the unsatisfactory parcel postage service which existed up till a few months ago between Canada and Trinidad. The rate was 34 cents per pound, while the rate to Barbados was 20 cents, and to Jamaica 20 cents, with the additional disadvantage that all parcels to Trindad were forwarded via England. We view with satisfaction the improvement which has been made. The Government has arranged for a reduction in rate to 16 cents, and the service will in future be carried on by direct line.

South African Tariffs.

The British South African Customs Union Convention of 1903 was superseded June 30, 1906, by a new tariff which has been accepted by the Cape of Good Hope, Natal, Orange River Colony and Transvaal and Southern Rhodesia. This gives a small preference averaging about 3 per cent. on practically all tariff items. From the information at hand it would appear that this new tariff is not so favorable to Canada as the 1903 tariff, which provided for a tariff on a large number of articles of 25 per cent., and on others of 2½ per cent.

British Commercial Agents.

One of the resolutions forwarded by the Association to the Sixth Congress of Chambers of Commerce of the Empire urged the appointment by Great Britain and the other colonies of commercial agents to Canada. Before the Congress met, the British Government appointed Mr. R. Grigg as a Commissioner to Canada for the purpose of making such appointments. The Association passed a resolution expressing its satisfaction at this appointment and putting the services of the Association at the disposal of Mr. Grigg.

Stamped Envelopes.

The Canadian Post Office issues two cent stamped envelopes, 3½ x 6 inches, white, at a rate of $22 per 1,000, and no provision is made for printing a return address. If any of these envelopes are spoiled and not used in the mail it is necessary to make formal application to Ottawa in order to secure a rebate.

The United States Post Office issues two cent stamped envelopes, 3¾ x 6¾ inches, white or amber, at a rate of $21.40 per 1,000. These envelopes are printed with the return address on the upper left hand corner without any additional charge, and envelopes may be returned and their equivalent in postage received on demand.

The conditions surrounding the issue of one cent envelopes are practically the same.

The use of stamped envelopes is desirable for many reasons. They are convenient and permit of a considerable saving in time, and in addition a stamped envelope, having also a return address, cannot well be used by any person other than the person for whom it was printed and thus an effective check is put on dishonest office help.

The above conditions have been called to the attention of the Postmaster-General with the recommendation that the Canadian regulations and prices be modified.

It gives your Committee pleasure to present this report, recording as it does the accomplishment of so much that is in the best interests of our country and of the members of the Association.

Respectfully submitted on behalf of the Committee.

THOS. RODEN, Chairman. J. F. M. STEWART, Secretary.

Mr. Saunders moved and Mr. Watts seconded the adoption of the report.

Mr. Saunders:—I wish to draw especial attention to the resolution in reference to the metric system. It is a subject which will have to be dealt with by the Association sometime, and is deserving of close consideration.

I wish, also, to acknowledge having received from the Secretary of the Association in some twenty cases trade enquiries from abroad. I am of the opinion that our manufacturers in this country have not availed themselves enough of the export trade. I am sure that not only in Australia and New Zealand, but in England, also, there is a large export trade waiting for them. I want to bear testimony to the efforts of our Secretary and his courtesy in sending out these applications which he receives from foreign points.

The report was adopted.

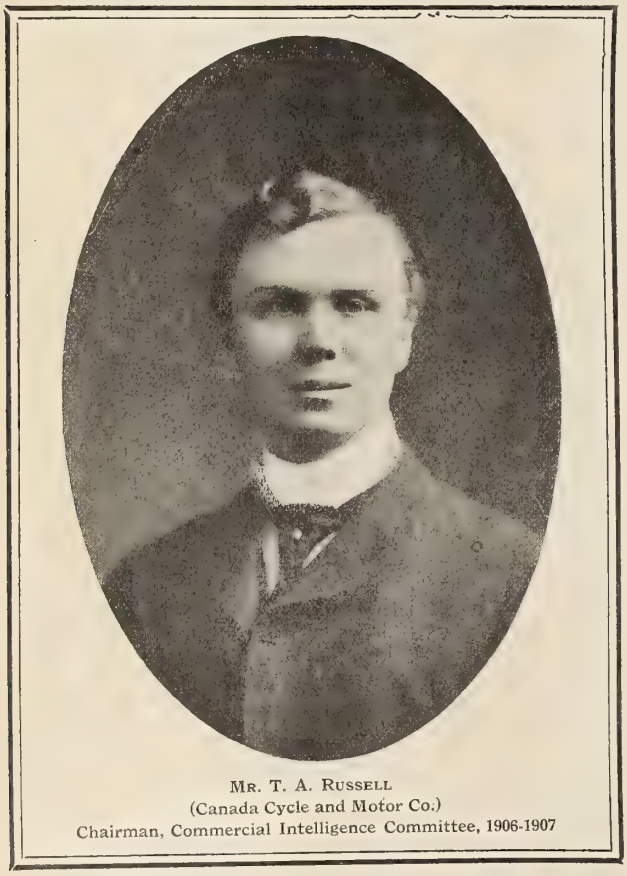
A Transportation Grievance.

The President:—One item of business was inadvertently omitted when the report of the Railway and Transportation Committee was under discussion. Mr. Pender has a subject which he wishes to address the meeting on.

Mr. James Pender:—The transportation question of this country, Mr. Chairman, is almost of as much importance as the tariff. On its proper solution depends, to a very large extent, the development of the country in all sections. If the farmers are charged a few cents more than they can bear, for the carriage of grain, it retards the Western country just that much. And at the same time, if the manufacturers are charged excessive freight on goods sent to the farmers, they are retarded in the development of their business. The railways have a practice of exacting as much as the traffic will bear, and, as all the railways in Canada have been in receipt of large subsidies from the municipalities of this country, I think the time has arrived when, in the interests of the country as a whole, we should take some steps to see that the rates charged by these transportation

companies are kept within reasonable bounds. At the present time the rate charged for bringing goods to Winnipeg is more than that charged in other parts of the country where the volume of business is very much less. This is not in the interests of the development of the country. If we can bring any influence to bear on the railways to modify these rates, I think we should certainly do so. To illustrate: the rate on fifth class goods to Victoria is 65 cents; whereas to Winnipeg, a distance little more than half, the rate is 70 cents.

In addition to that, I have particular cause to complain of the rates charged during the season of navigation. The new road, which has only been open a year or so, is glad to accept any rate dictated by the larger corporation. If the older corporation can afford to carry goods in the eastern part of Canada at a given rate, and make a reasonable profit, then at twice that rate for a like distance there must be an undue profit in the transaction of the business. On the same class of goods which come under the fifth rate, St. John to Montreal, 450 miles, a rate of 16½ cents is made. From Fort William to Winnipeg, the same distance, 40 cents is charged. If the railways can afford to carry the traffic for 16½ cents, certainly they can afford to reduce the rate where 150 per cent. more is being charged.



Mr. T. A. Russell
(Canada Cycle and Motor Co.)
Chairman, Commercial Intelligence Committee, 1906-1907

What is the immediate and direct result of all this? It means that every consumer has to pay 15 or 20 cents per hundred pounds more than he should for all the goods which he brings in from the East. That is a menace and a handicap, and it affects the development of business. A little while ago people thought the post-office would be bankrupt when the postage rates were reduced. But that reduction made the post-office a paying department. If freight rates were reduced to a reasonable figure, it would immensely assist the development of the community. It is clear the railways would not be injured by a reduction. There is not a manufacturer in this room but would be glad to accept business in which he would get 60 per cent. more than on the business he has carried on under severe competition. The railways have received in bonuses, it is estimated, the best part of $200,000,000. I have as much admiration for the service they have rendered as any one present, but I have no admiration for their magnificent ability to exact and to squeeze undue charges, as they undoubtedly do. I was told a few days ago of one class of goods from Victoria to the eastern seaboard which was charged 65 cents, and another class which was charged $1.05. Should not that be corrected as quickly as possible? It must be a serious drawback when there is this difference in the price of freight. It is said corporations have no souls. If the C.P.R. has one, it would require a powerful microscope to see it. We have been in the habit of sending missionaries to the East and the South Seas to save the souls of the heathen. Now, I think we can devote our services to doing missionary work in saving the soul of this "soulless" corporation. (Applause.)

The President:—We are all pleased to have Mr. Pender place his case before us. I think the best course will be for him to lay his case before Mr. Marlow, who will bring it before the Transportation Committee, and they will no doubt take it up with the Railway Commission.

Mr. Pender:—I shall have great pleasure in doing so.

The Reception at the Government House.

On Tuesday evening the members of the Association party were entertained by Sir Daniel McMillan, Lieutenant-Governor of Manitoba. The reception was held in Government House. The Lieutenant-Governor and Lady McMillan were most kindly hosts. In the ballroom many indulged in dancing while the drawing-rooms and spacious verandahs were filled with guests. The beautiful gardens around the house were lighted with colored incandescent lights, and attracted many from the more crowded rooms. Refreshments were served in the dining-room during the evening.

Wednesday, 9.30 A. M.

The President:—I shall call on the Secretary to read some announcements.

The Secretary read a telegram from Mr. George Booth in reply to the telegram sent the previous day; a telegram from Mr. A. E. Cross, Vice-President for the Alberta Branch; a telegram from Mr. John Hendry, Vice-President for British Columbia; a telegram from Sir Howard Vincent, M.P., and a telegram from Mr. Southam, Ottawa, in connection with the representation of the Inter-parliamentary Unions at the Second Hague Conference.

The last named telegram was referred to the Resolutions Committee for attention.

REPORT OF THE TARIFF COMMITTEE.

The President:—The next business on the agenda is to hear the report of the Tariff Committee from Mr. W. K. McNaught. Inasmuch as this is a very important and not very lengthy report, I will ask the Chairman, with your permission, to read it in full.

Mr. McNaught read the report as follows:

Your Tariff Committee begs to submit the following report.

The Dominion Tariff Commission, referred to in the last Annual Report of the Tariff Committee, has during its

sessions had representations made to it on the fiscal question in all parts of Canada. We confidently expected that a revision of the tariff would have been made at the last session of Parliament, but owing chiefly to an unfortunate accident to the Minister of Finance and the great amount of work involved it was unavoidably delayed. The Government has, however, announced that during the present recess they will revise the tariff, and will call Parliament together early in November to consider the same.

The Association has pointed out on more than one occasion the absolute necessity for a revision of the tariff. It has been urged that the tariff should not be altered at the present time in view of the prosperous condition which obtains throughout the Dominion. We submit, however, that this condition of national prosperity is not a result of our Customs tariff, but rather because the world generally is prosperous; under such conditions a general depression is hardly possible, even although our tariff is defective in many particulars.

We may in some measure also ascribe present conditions in Canada to an abnormal activity in the United States, which keeps their factories busily employed at home, and does away with the necessity of their exploiting foreign markets at slaughter prices. To this may be added the largely increased demand there is for goods in Canada owing to the general prosperity, the great expenditure on railways of all kinds, and to a satisfactory increase in our population.

The evidence presented to the Commission has, we think, shown conclusively that the tariff of nine years ago was not framed to meet the conditions of to-day. To ensure effectiveness the tariff must be kept up-to-date. The Association placed itself on record in 1902 to the effect that the tariff was not in keeping with the changed conditions; much less is it in accord with the present requirements.

In spite of objections to a more protective tariff presented to the Commission, the preponderating feeling throughout our country amongst all classes undoubtedly is that Canada should encourage its industries more effectively than it has done in the past. This feeling is largely the result of the campaign of education, which has been persistently carried on since the Halifax Convention of the Association in 1902, and also by the logic of events, as during the last few years conditions have greatly changed in the United States, and Canadians have found it at times impossible to compete against the enormous surplus output of their great organizations.

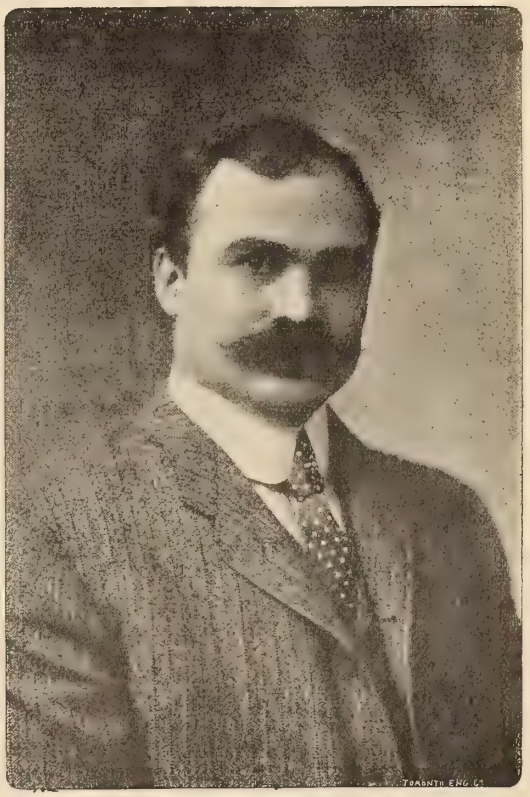
Two points of the greatest importance were emphasized before the Commission. In the first place the great West, which has been pointed out by some newspapers as being unanimously opposed to a protective tariff, has spoken differently, two of the strongest protectionist representations made to the Commission being presented at Winnipeg and Medicine Hat.

Secondly, the farmers, from one end of the country to the other, have requested increases in the tariff on their own products.

These two facts are cited to show that the contention of this Association, that Canada is a protectionist country, and demands a tariff that will keep Canadian men and money at home and provide a market for Canadian products, is borne out by the evidence taken by the Commission. In making this statement we are not unmindful that some representations were made in opposition to our contentions, asking for a lowering of the tariff, but they came mostly from members of free trade organizations, who treated this most important national question from an academic rather than from a practical standpoint.

At the last hearing of the Tariff Commission, which was held in Ottawa, the general case for the manufacturers was presented by a small deputation from the Association. The arguments advanced on that occasion for a revised tariff have been given wide publicity, not only in Canada but in Great Britain, and have not been answered.

As we have before pointed out, the time to give Canada a tariff to aid in its development is when the country is prosperous. The whole world has been experiencing an era of great trade activity, the United States and Canada particularly so. At present some Canadian industries are struggling against foreign competition. In a time of depression abroad, with increased efforts for trade by foreign countries, these industries could not stand with the tariff as it is at present. The time to build a dyke is when the



Mr. W. K. George
(The Standard Silver Co.)
Chairman, Tariff Committee, 1906-1907

stream runs low and not when it is swollen by the floods; the latter is the time the dyke is needed. Just so in trade,—general business depression is sure to occur sooner or later, and the time to revise the tariff is when the country is prosperous, and so prevent the possibility of ruinous foreign competition.

The committee views with regret the great increase in the importation of dutiable goods during the past year and the continuance of the excess of our imports over our exports, which this year amounts to $35,000,000. Canada's total import trade for 1905-6 reached $176,771,000, an increase of $19,606,000, of which increase $10,960,000 has been purchased from the United States. It is satisfactory, however, to your committee to note that if Canada has to go abroad to make such large purchases Great Britain's share is increasing very satisfactorily. This year our imports from Great Britain amounted to $69,298,000, which is an increase

of $7,972,336, or 13 per cent. over the previous year, and which may largely be attributed to the preferential tariff.

It has never been demonstrated more clearly than during the sittings of the Tariff Commission that the tariff is not now a political question. We regret that some of the newspapers of Canada have not realized this. The tariff is a business proposition, and the newspaper that puts its politics before its patriotism has not the true interests of our country at heart. The question is one that will bear full and frequent discussion, and actual conditions, not theories or political exigencies, are the principles upon which its revision should be based.

Your Tariff Committee believe that sentiment in Canada was never so thoroughly in accord regarding the tariff question as it is to-day. The true Canadian policy is, "Keep your money in circulation at home by buying goods made in Canada." The Canadian aspiration is that every industry, whether it be farming, mining, lumbering, fishing or manufacturing, should be protected and developed by a strong national tariff. Your committee believes that the Canadian Government will give the people what they demand, and that the tariff of 1907 will effectively foster and encourage every branch of our national industries.

Your committee desires:

The Halifax Resolution.

(1) That the Halifax resolution of 1902, which has been reaffirmed at every Annual Meeting of the Association since that date, be reaffirmed. The resolution is as follows:

"RESOLVED, that in the opinion of this Association the changed conditions which now obtain in Canada demand the immediate and thorough revision of the tariff upon lines which will more effectually transfer to the workshops of our Dominion the manufacture of many of the goods which we now import from other countries;

"THAT in any such revision the interests of all sections of the community, whether of agriculture, mining, fishing or manufacturing, should be fully considered, with a view not only to the preservation but to the further development of all these great natural industries;

"THAT, while such a tariff should primarily be framed for Canadian interests, it should nevertheless give a substantial preference to the Mother Country, and also to any other part of the British Empire with which reciprocal preferential trade can be arranged, recognizing always that under any conditions the minimum tariff must afford adequate protection to all Canadian producers."

The committee respectfully submit for your approval three other resolutions as follows:

1. Duty on Government Imports.

"RESOLVED, that when articles are purchased by or for the use of the Dominion Government, or for any of the Departments thereof, or by or for the Senate of the House of Commons, or by the National Transcontinental Railway or Intercolonial Railway, or for any other purpose, that in each case the amount of duty taxable on such articles (including the duty leviable under the Dumping Clause regulation) should be carefully considered, and the full amount of such duty should be added before prices are put into competition with Canadian prices."

2. Denatured Alcohol:

"WHEREAS, the United States Government have passed an Act for the withdrawal from bond, tax free, of denatured alcohol, to take effect January 1st, 1907;

"AND WHEREAS, certain European countries have enacted similar legislation;

"AND WHEREAS, Canada is particularly suited for the manufacture of both grain and wood alcohol;

"THEREFORE BE IT RESOLVED, that the Canadian Government be requested to consider carefully the regulations regarding the uses and cost of denatured alcohol in foreign countries, and to so adjust Canadian regulations that Canadian industries shall not be placed at any disadvantage."

3. **Steel Shipbuilding.**—(This resolution has been approved of by the Halifax Board of Trade and by the Nova Scotia Branch of the Canadian Manufacturers' Association.)

"WHEREAS, this Board considers it not only desirable but essential that Canada should have well-equipped shipbuilding yards, so that she should not be dependent upon foreign, or even British, builders for the maintenance of her mercantile marine;

"THAT proof of the decadence of this industry is furnished by the fact that, while the water-borne commerce of the country during the last thirty years has increased from $217,000,000 to $475,000,000, the aggregate tonnage of vessels registered in Canada during the same period has decreased from 1,158,363 tons to 672,838 tons;

"THAT the new vessels built in Canada during the year 1874 aggregated 190,765 tons, while last year the new tonnage only aggregated 18,554 tons, or less than one-tenth of the tonnage built thirty years ago;

"THAT the foregoing statements prove that Canada is steadily losing control of her own carrying trade, and that her builders are unable to compete with the highly-developed yards of other countries;

"THAT nearly all other countries have found it necessary to grant financial aid to their own builders in order to secure a share of their own carrying trade, and that such aid has in most cases enabled them to build up well-equipped shipbuilding plants that are now able to compete with foreign builders;

"THAT an effort should now be made to resuscitate this industry, which would provide skilled labor for our artisans, keep in the country the enormous sums paid out in freights, and enable Canada again to take her place as an important maritime power;

"THEREFORE RESOLVED, that we hereby urge the Dominion Government to take up this important question during the approaching session of Parliament and grant such adequate bounty on tonnage launched in Canada during a term of years as would place our builders on an equality with their chief competitors elsewhere."

All of which is respectfully submitted.

W. K. MCNAUGHT, Chairman. J. F. M. STEWART, Secretary.

Mr. McNaught:—In moving the adoption of the resolution on the tariff, it is necessary for me to add nothing to what is said in the report itself. I am sure that no one who knows the feeling of the manufacturers in Canada can fail to agree with the report. The time to reform the tariff is when the country is in a state of prosperity. I have much pleasure in moving the adoption of the resolution in the report.

Mr. George:—I second the motion.

The President:—You have heard the adoption of the resolution moved and seconded. I wish to state that according to our custom, we do not expect that any member will take up grievances which will refer to his business alone. This discussion will be on national lines. It will deal with the tariff as it affects the whole country.

Mr. George:—I had not thought of saying anything special on this report. My views are pretty well known to

the members of this Association. I think that the gist of the whole question is contained in the old Halifax resolution. That is the basis on which we should work in the tariff revision. We all recognize that the great majority of our industries, under the conditions in which they stand to-day, are exceptionally prosperous. But we do believe that by revising the tariff, and bringing it up to the requirements of present conditions, we would cause many more industries to be brought into this country, and we would thus aid in the development and upbuilding of Canada. We recognize that years of depression will follow years of prosperity, and, as the report says, the time to prepare for trouble is when the question can be considered calmly. We also recognize that some industries have trouble in meeting competition, and it is on that particular ground that we ask for a revision of the tariff. We are not asking for an extreme tariff. We have never advocated an extreme tariff, as a policy of the Association. I think I can promise you that the Tariff Committee will not endorse extreme requests, but they will try to carry out what is stated in the old Halifax resolution. At the present time industries are being transferred to Canada from the United States almost weekly. Any thinking man knows that nothing but the tariff induces manufacturers in the United States to establish branches here. These factories are furnishing employment to thousands of workmen. Thus are our cities being built up and a market provided for our home produce. And after all the home market is the best possible market.



Park and River Scene, Winnipeg

The President:—You have heard the Tariff Committee's report. Is it your pleasure that the first resolution which Mr. McNaught has read be adopted.

The resolution was adopted.

Mr. McNaught:—The next resolution has been considered by, and approved by the Executive Council. There has been an amendment offered as follows: That the following words be added: Resolved that clause 450 of the customs tariff be struck out, and the following be substituted for it: (Then follows resolution 1 of the printed report).

"That when articles are purchased by or for the use of the Dominion Government, or for any of the Departments thereof, or by or for the Senate or the House of Commons, or by the National Transcontinental Railway or Intercolonial Railway, or for any other purpose, that in each case the amount of duty taxable on such articles (including the duty leviable under the Dumping Clause regulation) should be carefully considered, and the full amount of such duty should be added before prices are put into competition with Canadian prices."

This was carried.

Mr. McNaught:—I move that the resolution dealing with denatured alcohol be adopted.

This was carried.

Encourage Shipbuilding.

Mr. McNaught:—The next resolution refers to steel shipbuilding. A resolution sent here by the Montreal Branch, has been considered preferable to the one from Halifax, as it covers all the ground in a much more concise form. Instead of No. 3 I will read the one which we have decided to put before the meeting and which we recommend. It reads as follows: "Whereas, with the advance of our other industries it is desirable that steel shipbuilding should be encouraged in Canada, in order that we should embark on another big industry and render ourselves less dependent of the builders and carriers of other countries; therefore be it resolved that the Canadian Manufacturers' Association, in convention assembled, recommends to the favorable consideration of the Dominion Government the application of such bounties for this industry as will encourage its establishment." That covers the ground much better, and I think the Association should adopt it. I move its adoption.

Mr. McLennan:—The use of wooden ships for carrying lumber is entirely ignored in this resolution. I see no reason why, if wooden ships are useful, they should be neglected for steel. The resolution should include ships of every description. The question of wooden vessels is being discussed very largely on the coast. The Government have been urged several times to encourage them.

Mr. McNaught:—So far as the wooden ship industry is concerned, on the Eastern coast we can build them about as cheaply as anywhere. But the wooden ship on the Eastern coast is out of date. It is in view of this that we urge that the building of steel ships should be subsidized. So far as the building of wooden ships is concerned, if you want to incorporate that, you will have to change the resolution considerably. I think it ought to be left as it is.

Mr. McLennan:—What effect would it have?

The President:—The great need at the present time is for more steel ships. Instead of having our steel ships made in some other country, we should prefer the Government to take hold of it and build a large shipbuilding yard. Our steel tonnage in the country has been decreasing. If a ship yard was erected on a proper scale, it would mean increased consumption of steel, and be good all round.

Mr. McLennan:—I have no objection to the resolution, but I think it might go further. In advocating a bonus to the steamship builder, we should consider the lumber industry, which, as you know, is largely carried on in 3, 4 and

6-masted schooners. If you do not see fit to change it, I am quite willing to leave the resolution as it stands.

Mr. McNaught:—There wasn't a steel ship built in this country before three years ago. The building now is very small. We have the raw material, and we ought to subsidize and give a bounty so as to encourage in some way the establishment of the industry. The resolution asks for bounties of some kind or another. I do not suppose you want bounties on wooden ships. I do not think the convention would care to encourage that. We want to encourage the most modern thing in the way of shipbuilding, and that is what is aimed at in the resolution.

Mr. Dan Wilson:—One of the objections to shipbuilding in Canada at the present time, is that steel ships are brought in practically from other countries, and a large number of parts of them are under heavy duties.

A vote having been taken, the motion was declared carried.

Mr. McNaught then moved, seconded by Mr. George, the adoption of the report as a whole. Carried.

BRITISH OFFICE COMMITTEE.

The President:—I shall now call on Mr. Watts to present the report of the British Office Committee.

Mr. Watts read the report as follows:—

The Parliamentary Committee recommended to the Executive Council of the Association on July 19th, 1906, a resolution as follows:—

> "Resolved that,—In view of the labor situation in Canada at the present time, and of the replies received to the enquiry circular sent out to the members of the Association on June 28th, 1906, the Committee recommend that the Executive Council appoint a special Labor Department Committee for the purpose of presenting a plan for the organization of a Labor Bureau in Great Britain supplemented with whatever organization is deemed necessary in Canada, and that the Committee be authorized to make such investigations and expenditures up to $200 as are deemed necessary for the purposes of the Committee."

This resolution was fully discussed and passed, and the Committee now reporting was appointed.

The Committee reported to the August meeting of the Executive Council, and made the following recommendations:—

(1) That any office opened in Great Britain should be opened as a general office for the work of the Canadian Manufacturers' Association, and not for the particular purpose of securing labor. Such an office would serve the following purposes:—

(a) To give to the Association direct representation in Great Britain.
(b) To investigate, answer and index all trade or other enquiries.
(c) To make a careful distribution of catalogues and other printed matter.
(d) To secure special information for Canadian firms respecting Government contracts.
(e) To secure for the members of the Association such labor as they require and cannot secure in Canada.
(f) To distribute through the press and otherwise important information respecting Canada and her manufactures.
(g) To secure information regarding other markets which may be open to Canadian exporters.
(h) To secure information for members regarding the sources of supply of raw materials required in their industries.
(i) To officially represent "Industrial Canada."
(j) To undertake such other duties as the Association may from time to time direct.

(2) That the Association should make an annual appropriation of $2,000 towards the maintenance of such office.

(3) That fees, to be decided upon, should be charged for help supplied and other services, to defray the balance of the cost of the office. The Committee estimate the annual cost of the office to be $6,000, to be raised as indicated, viz.:—

Annual appropriation by Association	$2,000
Income from fees and charges for services....	4,000
	$6,000

(4) That providing the recommendation as above is approved of, a Standing Committee be appointed to supervise all matters in connection with the office.

All of which is submitted,

Geo. W. Watts, Chairman. J. F. M. Stewart, Secretary.

The report was considered in private session, and a lengthy discussion followed. There was no difference of opinion in regard to the advisability of opening an office for the purposes mentioned in the report. The financing of it was carefully considered, but it was felt that the Association could meet any additional expense which a representative in England would entail. The report was unanimously adopted.

AMENDMENTS TO CONSTITUTION.

The President:—I will ask the Secretary to read the amendments to the constitution in the order in which they appear on this memorandum.

The Secretary then read the first amendment, as revised by the Committee on Nominations and Resolutions, as follows:

"Active membership in the Association shall be open to individuals, firms and corporations actively engaged as manufacturers in the Dominion of Canada; each member shall nominate one individual identified with the business as representative in the Association; each member shall be entitled to have one or more additional representatives, but each such additional representative shall be identified with the manufacturing industry or industries he represents; all representatives shall exercise their rights in the Association only while connected with the business of the member nominating them and they are subject to removal or to substitution by such member. Applications for active membership and nominations of representatives shall be made in writing to the Secretary. Each application for membership and each nomination of a representative shall be referred to the Reception and Membership Committee, which Committee shall decide whether or not the manufacturing interests of the member or representative nominated in each case are such as to warrant the acceptance of the application or nomination. The Reception and Membership Committee shall report to the Executive Council its recommendation and the acceptance or rejection of the application or nomination shall be decided by the Executive Council."

The President:—I think you are all aware that under our present constitution a firm which is actively engaged in the manufacturing business could, if it so desired, have its lawyer put up as a second member and its physician as a third member, by paying the additional fees. The authors of this amendment felt that we should confine the membership exclusively to those actively engaged in or giving all their time to the business, and therefore we thought it important to bring this matter forward. I hope you will express yourselves freely on this point.

Mr. Rowley:—I should like to ask whether with this amendment all membership will not rest largely, in fact almost entirely, with the Membership Committee? Is that or is that not the effect and intention?

The President:—That will be the effect.

Mr. Rowley:—That is what I supposed; it is a very good plan, and therefore I suppose no hardship will be done. No member of the Association, I take it, nor any one who is a responsible member of a firm or engaged in the manufacturing business in Canada, is likely to be excluded. As I understand it, this resolution is intended to prevent the possibility of those who are not manufacturers taking advantage, to a greater or less extent, of some of the privileges which this Association pays for, and some which it doesn't pay for, but which are accorded to its members by reason of the importance of the body. In other words, people who have no particular right to them shall have no share in these privileges. Is that it?

The President:—Yes.

Mr. Rowley:—You speak of a man being actively engaged in business. The fact of his being a lawyer or doctor or professional man should not debar him if he is a director actively engaged in the firm's business. For example a solicitor who is a director, may be actively engaged in the business of the company.

The President:—This amendment will not debar such a man. Last year we decided to have an excursion to Great Britain, and a great many professional men, desirous of taking the trip said: "How can we become members of the C. M. A.?" This is the situation which we are trying to remedy. Under the amendment no professional man would be eligible merely through being a shareholder.

Mr. George:—It will rest with the Reception and Membership Committee to decide whether they will accept any applicant. We must give them some discretionary power. This is given them by the proposed change in the constitution; they did not have it before and it created a great deal of difficulty. I think the by-laws are about as wide as can be expected, considering the nature of our Association.

Mr. Rowley:—Will it be retroactive?

The President:—No.

Mr. Rowley:—No member in good standing will be debarred?

The President:—No.

Mr. Henderson:—It appears to me you are opening the doors wider than before. I do not think any gentleman identified with the business should be debarred as first member. Then the clause speaks of a second or third member, so that in point of fact anybody connected with the industry may become a member of the Association.

Procedure in Electing Members.

The President:—The way I understand that, Mr. Henderson, is that such an application comes before the Membership Committee, and it will be the duty of this Committee to find out who the applicants are, and what particular interest in the firm they hold. We have to leave that to the judgment of the Committee. They will report to the Executive Council. If the Council do not consider the man eligible, they can reject the Committee's recommendation. We are open for suggestions.

Mr. Henderson:—It seems to me it is throwing the onus on the Reception and Membership Committee. When there is no definite rule laid down their decisions are liable to vary. I am sure there would be no discrimination, but some definite qualification should be laid down to avoid trouble.

Mr. Vandry:—While we are drawing the line we should limit ourselves to the active officers of the company and to the directors; otherwise any small shareholder might become a member of this Association; a man holding a $100 share.

The President:—A man holding a $100 share would not be allowed to become a member, as the Reception Committee would refuse such an applicant.

Mr. Gundy:—I am heartily in accord with Mr. Vandry, because I have helped to pass on certain names. Although the definition of membership in the Association is fairly clear, it was very difficult to find two men alike in deciding whether the applicant was a proper one or not. It seems to me we will not weaken the organization, but strengthen it; we will not lessen the membership, but have a more effective membership, if the resolution were to define for the guidance of the Reception Committee, just about what Mr. Vandry has said. You do not limit the membership too much when you say that it shall be confined to directors or officers of existing corporations. It is pretty strong, but I should favor a strong definition of what we mean. (hear, hear).

Mr. Dusseau:—Supposing a company is formed in Toronto, and in order to complete the directorate they give the bookkeeper and the superintendent a share apiece and name them as fourth and fifth directors; then in this case these men could become members of the Association, although they held only one share in the company.

Mr. McNaught:—I am strongly in favor of Mr. Vandry's amendment. I proposed it myself once before, but it was rejected. I am glad to see it is backed by the member from Quebec. I think the member should be one of the directors. I hope this will be inserted in the resolution.

Mr. Rowley:—I will have much pleasure in seconding that.

The President:—Your motion is that only officers and members of firms shall be eligible, besides those actively engaged in manufacturing?

Mr. Vandry:—The actual members.

The President:—But in the case of new applications for membership, you would have it apply to the active officers and directors.

Mr. Dusseau:—Suppose there is a corporation with five directors, and some five or six members who are not officers of the company; some are simply representatives, such as salesmen; in that case, you would bar these men from membership?

Mr. Cockshutt:—I think we should include all those actively engaged in manufacturing.

Mr. George:—I do not think you could go farther than you go in this resolution. I think it is tied down about as closely as is advisable. You have to place some discretion in the Reception Committee. There are some present

who are active as third, fourth or fifth members, who would be debarred under the amendment. Many new members, too, would be cut off, if you carried this recommendation.

The Status of Partners.

Mr. Tindall:—The difficulty in this is that the discussion has taken place almost entirely on the question of incorporated companies. How will you do with the partner who is simply a partner? There may be three or four partners, and you may say no partner will be eligible. How can you decide on the matter of partnerships that are not incorporated? I think you are getting out of one difficulty into another.

There is another point. Some companies hold very large interests in other companies. They are large stockholders. Yet for some reasons they are not identified as officers or directors. Membership should be defined clearly. At the same time the Committee should be granted some discretionary powers.

Mr. LeMaistre:—I have no wish to take up the time of the meeting, but perhaps I might be allowed to say, as an old man, and as having had experience in kindred institutions in the Mother country, that I strongly support the recommendation of the Committee. I think it will be a false step to limit the membership in the sense proposed. You will find by experience that you will be shutting out very valuable representatives, for it often occurs in companies that members or shareholders are unable to work upon the directorate owing to various circumstances, but they have experience, and would be valuable representatives in an Association of this kind.

Mr. Gundy:—I wish to move an amendment, seconded by Mr. Henderson, that after the words "such additional representatives" the resolution shall read: "Such additional representative shall be an officer, a director, or one actively engaged in the manufacturing business." I think these words will cover all the ground and will embrace every man who could be a member of this Association.

Mr. Henderson:—I second that, and I think it will cover the whole ground and save the Committee a great deal of time.

Mr. Dusseau:—Does the manager of a works come under the heading of an officer?

The President:—Yes.

Mr. Watts:—I think it is wrong to say a manager is an officer of the company. He would be if he was nominated by the directors, but unless he is on the minutes of the company, he is not an officer in law. However, he is covered now by the words, "actively identified."

Mr. Fraser:—I think we are making a mountain out of a mole hill. If you will read the resolution it says the Committee shall report to the Executive Council, and the acceptance shall be decided by the Executive Council. I think we can safely leave the matter in their hands, and I would very much favor doing that.

The amendment to the amendment, as moved by Mr. Gundy and seconded by Mr. Henderson, was put and lost.

The resolution, as read by the Secretary, was then put and was carried.

Constitution of Executive Council.

The Secretary read amendment No. 2 as follows:

"The Executive Council shall be composed of the President, Treasurer, Chairmen of Standing Committees, Chairmen of the Branches of the Association, Chairmen of the Sections of the Association, and one member for each twenty members of the Association as determined by the membership on the day of Annual Meetings."

Mr. Stewart:—Under the present By-laws the Executive Council contains one member for every fifteen in the Association. The Association has grown so big that the Council has now become unwieldy. The proposed amendment will reduce the ratio to one to twenty.

Mr. George:—There is just one change I think we ought to make, that is in regard to the date upon which the membership is to be determined. The ballot must be made out some time before the Annual Meeting, and in the intervening period the number of members may increase, as in the case of Winnipeg just before this present Convention. I think it should read "as determined by the membership thirty days before the Annual Meeting."

The President:—Thank you, Mr. George, for drawing attention to that point.

Mr. McNaught:—I am informed that Winnipeg is entitled to seven, and the voting paper allows only five. They should certainly be allowed seven by the By-law.

Mr. George:—I think that can be cleared up this time by taking the seven highest names.

The President:—Would that meet with the approval of the Winnipeg gentlemen present?

Mr. McIntyre:—That will be quite satisfactory.

The amendment was carried.

Standing Committee for Technical Education.

He then read amendments Nos. 3 and 4 as follows:—

"The Tariff Committee, the Railway and Transportation Committee, the Parliamentary Committee, the Reception and Membership Committee, the Commercial Intelligence Committee and the Technical Education Committee shall consist of twelve active members, with power to add to their numbers."

"The Committee on INDUSTRIAL CANADA shall consist of seven active members, with power to add to their numbers."

The Secretary:—No. 3 provides for making the Technical Education Committee a standing committee, the same as the other active committees; and further to increase the number of committeemen from 10 to 12, in order to give members outside of Toronto and near Toronto a larger representation on the committees, and to secure a quorum at each committee meeting. No. 4 provides for an increase in the number of members of the INDUSTRIAL CANADA Committee from 5 to 7.

These amendments were carried.

The Secretary read Amendment No. 5 as follows:—

"The officers shall be ex-officio members of all committees. . . . A Special Committee on Finance, consisting of three members of the Association, shall be named at the first meeting of the Executive Council held after the Annual General Meeting."

The Secretary:—This merely corrects a clerical error by striking out the general officers from the membership of the Finance Committee. The By-law includes them as members of all committees.—Carried.

The Secretary:—Amendment No. 6 has to do with resignations. Under the sub-head, Reception and Membership Committee, it is proposed to make it read:—"This Committee shall have power to devise means for securing new members. They shall recommend to the Executive Council for acceptance such applications for membership

and such resignations as they believe desirable." At the present time there is no specified way of getting resignations officially before the Council, although the work has always been done by the Reception Committee.—Carried.

Amendment No. 7.—"Commercial Intelligence. This Committee shall have power to deal with such questions as the metric system; moneys, weights and measures; expositions held in Great Britain and foreign countries, and all information that will be beneficial to Canadian exporters."

The Secretary:—This amendment provides for the handing over of part of the work up to the present done by the Commercial Intelligence Committee to the newly constituted Technical Education Committee.—Carried.

Amendment No. 8.—"Technical Education Committee—The duty of this Committee shall be to further in every possible way the inauguration and development of a national system of technical training, and give its support and assistance to such Dominion, provincial, municipal or private educational efforts as are approved of by the Association."—Carried.

The Secretary:—Amendment No. 9 provides for increasing the fee of members employing between 50 and 100 hands from $10 to $15 a year.

"The annual membership fee in this Association shall be for members employing under fifty employees, $10; for members employing fifty and less than one hundred employees, $15; for members employing one hundred or more employees, $25; for each additional representative after the first, from any member, $10."

The Payment of Dues.

Mr. Rowley:—Might I ask whether or not provision will be made in the amended clause for the payment of dues? That seems to be left out. It is in the original By-law, but does not appear to be in the amendment. In the original clause it is provided that the first payment shall become due on the election of a member, and each subsequent payment twelve months thereafter. Would it not be better to have a subscription paid at the end of each year, and charge the member pro rata for the time between his admission and the first of the following January. It seems to me it would save a good deal of trouble in the office. I think it would be acceptable to the members to pay their fees at the first of each year rather than at an irregular period. Certainly this amendment that provides for the payment of fees must be passed.

The President:—Thank you, Mr. Rowley, for drawing our attention to this; we will have it attended to. In regard to charging a member in proportion to the time pro rata, our Secretary says we have already tried it and have not found it satisfactory.

Mr. Rowley:—It is done in all the clubs and nearly all other associations that I know of. A man is elected in September, and he pays three months' fees, and at the end of the year he pays his annual fee.

The amendment was carried.

The Secretary:—The By-law covering resignations now reads as follows:—

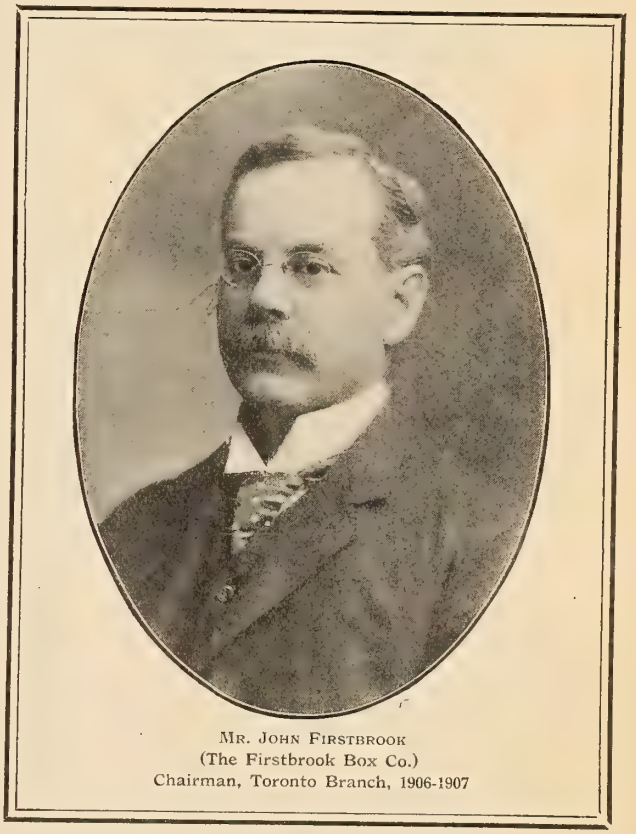
"All resignations of office or membership shall be in writing, addressed to the Secretary, and shall be submitted by him at the next meeting of the Executive Council."

It is proposed that the By-law should be amended to read as follows:—"All resignations of office or membership shall be in writing, addressed to the Secretary, and shall be submitted by him at the next meeting of the Executive Council, or at the first meeting of a standing Committee competent to deal with the same."—Carried.

The President:—I wish to get authority from the Annual Meeting with regard to the opening of the London office. I would suggest that the matter be referred to the first meeting of the new Executive Council.—Confirmed.

Greetings to Lord Strathcona.

Mr. George:—I have a very pleasant duty to perform at this juncture. It is to move that a cablegram be sent to our Honorary Member, Lord Strathcona, conveying to him the greetings of this thirty-fifth convention of the C.M.A. (Applause.) It is entirely unnecessary to speak at length about Lord Strathcona. He is well known, respected, and beloved, I might in justice say, by all Canadians. No man has placed Canada on such a pinnacle, in the eyes of the Motherland and Europe, as Lord Strathcona. His efforts on



Mr. John Firstbrook
(The Firstbrook Box Co.)
Chairman, Toronto Branch, 1906-1907

behalf of Canada, and on behalf of any Canadian who visits Great Britain, are inestimable. I do not think we could do anything more befitting on this occasion, and in this city, with which he was so intimately connected, than to send him our greetings. I have great pleasure in moving that this be done.

Mr. McNaught:—I have pleasure in seconding the motion. No man in England stands higher than Lord Strathcona, nor do I think there is a man in that country who wields a greater influence than he. Few Canadians know what they owe to Lord Strathcona. He is a power over there, and he is a unique personality. I am sure that every member who was over there last year will agree that we owe him a debt of gratitude which we can never repay, and which we can never forget.

The President:—I have great pleasure, as the chief officer of the Association for the time being, in asking you to give a rising approval to the resolution.

The vote was carried by all members present rising and giving three cheers.

The President:—The cablegram will be sent at once.

Mr. Watts:—I would like to call your attention to the British Office Committee. As it stands at present it is out of office. The Executive Council is to appoint a permanent committee, but the committee will not meet until the second or third week of October, and if the matter is left it will not be attended to until that time.

The President:—It might be well to empower the present committee to act until the new committee is formed.

This was agreed to.

Mr. Saunders:—Yesterday I had pleasure in moving a vote of thanks to our Parliamentary Committee for their admirable work in the interests of the Association. I now take pleasure in moving a vote of thanks to the various committees for their faithful work during the past year.

Mr. Tindall:—I second that motion, and I wish to add that the success of our Association depends largely on the work done by the committees. If the committee work is well done we get through a large amount of useful business.

The resolution was carried.

Resolutions of Thanks.

The following resolutions were then moved and adopted with hearty applause:—

Resolved, that the heartiest thanks of this Association be tendered:—

1. To His Honor the Lieutenant-Governor of the Province of Manitoba and Lady McMillan for their kindly courtesy and welcome at Government House.

2. To His Worship the Mayor, Mr. Thos. Sharpe, and the officers of the Corporation of the City of Winnipeg for their generous entertainment to the members of this Association and their friends.

3. To the President and members of the Manitoba Club and the Commercial Club, for extending to visiting members of the Association the privileges of membership in the clubs during the days of the Convention.

4. To the C.P.R. and the G.N.W. and the C.N. Telegraph Companies, and the Bell Telephone Company, for the courtesies extended to the members present at the Convention.

5. To the Vice-President of the Association for the Province of Manitoba, and the officers and members of the Manitoba Branch for the magnificent reception and hospitality extended to the visiting members of the Convention.

6. To Mr. and Mrs. E. L. Drewry for their very kind attention to the ladies of the Convention party.

7. To the Winnipeg Real Estate Exchange and the Western Canada Flour Mills Co. for their generous assistance in enabling the visitors to see the city and its industries.

8. To Mr. Hayter Reid, Mr. W. Taylor and the staff of the Royal Alexandra, for their kind assistance and efforts in making a success of the Convention.

9. To the Press of the Dominion, and particularly of the City of Winnipeg, for their excellent reports of the proceedings of the Convention.

The Secretary:—The next resolution has to do with the fast mail service. The resolution reads as follows:—

Fast Mail Service.

"That whereas the Canadian Manufacturers' Association views with satisfaction the recent great improvements which have been made by the steamship lines, in the service between Canadian ports and Great Britain;

"And whereas it is important that the steamship companies undertaking this service receive the hearty co-operation of the Dominion Post Office Department, which Department has not, as yet, arranged for the prompt delivery of mails at Rimouski;

"Therefore, be it resolved that this Association request the Dominion Post Office Department to arrange with the Intercolonial Railways to have the mail train arrive at Rimouski at the time the steamships are due to arrive." Carried.

The Secretary:—I have also a resolution relating to Technical Education, reading as follows:—

Technical Education.

"Whereas the two last Conventions of the Canadian Manufacturers' Association unanimously urged the great importance of better facilities for the Canadian workmen and manufacturers for Technical Education, and appointed a special Commission to report on the most advisable methods for supplying these facilities;

"And whereas, this committee has presented the Association's request, which has been endorsed by the leaders of educational thought as well as by organized labor;

"Be it resolved that the Association again place itself on record as feeling more and more keenly, and recognizing more and more clearly the great call for better facilities for technical training, adapted to our natural resources, and to our industrial developments, and as being most desirous of the Government taking early action, and that a copy of this resolution be forwarded to the Premier and Members of the Dominion Cabinet."—Carried.

Franchise for Incorporated Companies.

The Secretary:—I have also a resolution dealing with the franchise of incorporated companies, reading as follows:

"Resolved that the incoming Parliamentary Committee of the Association be requested to take up the question of incorporated companies having the power of voting on municipal by-laws and to have legislation introduced in the different Provincial Legislatures for the purpose of securing such voting power."—Carried.

Preference by Canadian Ports.

The last resolution is as follows:—

Resolved that the Canadian Manufacturers' Association, in convention assembled, desirous of building up Canadian Ports, unanimously favors the application of the Canadian Customs preference only to goods coming into Canada direct from the country of their origin.—Carried.

The President:—This closes the business on the agenda for the time being. The next matter is the election of officers.

The Election of Officers.

The Secretary:—I will read the names of those elected by acclamation: For President, Mr. Harry Cockshutt (long applause).

Mr. Ballantyne:—Gentlemen, I am sure you are all as pleased as I am, that our good friend, Mr. Harry Cockshutt, has been called to the highest honors this Association has to offer. I thing we can congratulate ourselves on calling to the chair such a capable and strong business man as Mr. Cockshutt. He requires no recommendation from my lips. He is well-known to all the members of this Association throughout the length and breadth of the Dominion. He is at the head of a large manufacturing concern, a strong Canadian, and in every way qualified to fill the position you have called him to occupy.

Mr. Ballantyne, addressing Mr. Cockshutt, continued:—I have, therefore, very much pleasure in welcoming you, Mr. Cockshutt, to the chair (long and loud cheers, during which Mr. Cockshutt took his place as President of the Association).

Mr. Cockshutt:—Gentleman, I can assure you that I appreciate very much, the words Mr. Ballantyne has said regarding me. I feel that he has said too much, and given me too good a certificate of character, but whatever I can do for the Canadian Manufacturers' Association, now that I am President, I will do it. I will do my work earnestly and with the very best regard to its interests. I know the responsibility of the office. I have had some experience with Past Presidents, and have seen the work they have done. If I can live up to the ideals of the Presidents who have preceded me I hope at the end of my office you will all be satisfied.

Our President who has just retired, Mr. Ballantyne, has shown himself to be a strong man. He has guided the Association wisely and well, but his speech, made here at the opening of this Convention, was a speech that would do any man proud. It showed what was being done in Canada, and what at the same time the Canadian Manufacturers' Association had behind them, and what they have before them. They have many greater things to do in the future than in the past, and I hope that we will be able to accomplish something that will bring good results to this splendid Association.

We, who are members of the Association, do not realize the full value it is to us. There are so many members of it that do not understand the working of it. The Parliamentary Committee alone, is worth many times the fees we pay annually, for the services which it renders to us in keeping legislation in the right direction. The Transportation Committee has made dollars for the manufacturers, and large shippers in the country. In these two Committees we have enough to show for what we pay into the Association. And the other committees likewise—it is not necessary to say anything about them. The men behind the Association have proved themselves to be good men and I believe in the future it will be the same. I will do the best I can, and from the bottom of my heart I thank you for the honor you have done me.

The Retiring President Thanked.

Mr. Lloyd Harris:—I do not think we should let this opportunity pass without giving our Past President some expression of our great appreciation of him, and I have very great pleasure indeed, and my good friend, Mr. McIntyre, of Winnipeg, has consented to second it, in moving the adoption of the resolution I am about to read, and which I know you will all so heartily endorse.

Resolved, that this Association desires to express its appreciation of the splendid services rendered to our organization and to Canada by our retiring President, Mr. C. C. Ballantyne, to render to him our sincere thanks for the unselfish efforts he has made in the conduct of the Association's affairs during his term of office and for the personal sacrifices he has so cheerfully and willingly made for the advancement of the interests of the Association; and that the Finance Committee be authorized to prepare a suitable expression of our appreciation to be formally tendered to Mr. Ballantyne at some time and place to be arranged.

I have great pleasure in moving this, and I will ask the newly elected President to put it to the meeting.

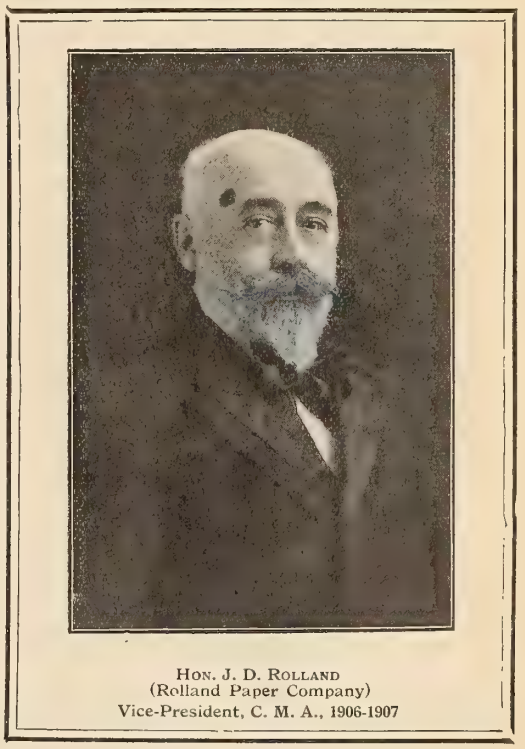
Mr. McIntyre:—Nothing could give me greater pleasure than to second this resolution. The affairs of the Association for the last year have been conducted so carefully, and well, that it would be entirely out of place to allow Mr. Ballantyne to retire without expressing our appreciation of him. If it was for nothing else but his good looks, we should be fully justified in passing a resolution like this. I will only add that two of the ladies present have said: "It is no wonder your Association is such a success with such a lovely President." (Laughter and cheers.)

The resolution was carried.

The President:—I have much pleasure, Mr. Ballantyne, in tendering you this hearty vote of thanks.

A Complimentary Banquet.

Mr. J. S. N. Dougall:—Following the very able services rendered by the retiring President during the past year, the members of the Montreal Branch Executive have expressed their unanimous wish that a complimentary banquet be tendered to him by the Association at Montreal, his home city, at some date during the month of November next if convenient, in which case the Montreal Branch will gladly undertake the arrangements.



Hon. J. D. Rolland
(Rolland Paper Company)
Vice-President, C. M. A., 1906-1907

I move that such a banquet be held.

Mr. George seconded it, and the motion was carried.

Mr. Ballantyne:—Mr. President and Gentlemen, I think I have, during the few years I have been associated with you in the good work of The Canadian Manufacturers' Association, received many times tokens of regard sufficient to satisfy me or any ordinary man. Nevertheless, I appreciate very highly, indeed, the kindly resolution this meeting generally has adopted.

I have been connected with the Association since 1899, being brought into its membership by Mr. J. O. Thorne, and I want to thank him for bringing me in. At that time our membership was only 132; since that time we have increased to 2,100. When I joined the Association, I saw what a great chance there was to increase the membership and consequent usefulness of the organization, and it has been a pleasure for me to do what I could in that direction.

I do not claim I have done very much. I have only performed my duty as a fellow member. I have formed many warm friendships and I hope they will be always retained. I know the prosperity of our Association will continue and under the Presidency of Mr. Cockshutt and under your united efforts the work will go on. Although I have just retired from the office of President, I will continue while life lasts, to do all I can in the interests of the Canadian Manufacturers' Association. To Mr. Dougall and my Montreal friends, I offer my sincere thanks, for their kind remarks. As to the complimentary dinner, I can under the circumstances do no more than accept.

Mr. Rowley:—I have been waiting for some bachelor to express, on behalf of all the members, our gratitude to Mrs. Ballantyne for the happy way in which she has helped her husband to make this excursion and Convention a success. The pleasure and enjoyment, which have characterized the whole trip, are attributable in no small measure to her tactful and gracious presence. She is "pleasant to walk with, charming to talk with, and good to look upon." I move that we ask Mr. Ballantyne to convey to Mrs. Ballantyne our sincere thanks.

I shall not ask any one to second this motion, as we shall all second it.

The President:—Those who wish to second it, please stand.

The delegates rose and gave three rousing cheers for Mrs. Ballantyne.

Mr. Ballantyne:—Mr. President, Mr. Rowley, and Gentlemen, I do not think Mrs. Ballantyne expected, when she listened to the opening eloquent speech of the new President, that she would find herself in the delicate position she occupies at the present time. Nevertheless on behalf of Mrs. Ballantyne I thank you for the kind vote of thanks you have offered to her, and I assure you there is no more loyal member of the Canadian Manufacturers' Association than she.

Hon. J. D. Rolland, Vice-President.

The Secretary:—The Hon. J. D. Rolland, of the Rolland Paper Company of Montreal, has been elected Vice-President by acclamation.

Mr. Ballantyne:—The Hon. J. D. Rolland, our new Vice-President, came to the depot when we left, and asked me to express his very keen regret at being unable to be with us at this 35th Annual Convention. Only very pressing business kept him away, and there were almost tears in his eyes when the train pulled out and left him on the Montreal platform. Our Association has often been referred to as large. We know no politics or nationality, and I am very happy, indeed, coming from the Province of Quebec and City of Montreal, to know that this Association has called to the Vice-Presidency, which means to the Presidential Chair next year, one of our most prominent French citizens, a man who is known and respected throughout the whole Dominion of Canada. Mr. Rolland has been actively connected with the Association for some years, not only since the amalgamation between the Montreal and the Dominion Associations took place, I think in 1900, but also during the separate existence of the Montreal Association. The membership in Montreal is largely due to Mr. Rolland's efforts. His election is a great pleasure to myself, and also to all members of the Montreal Branch, and I am sure I am voicing the sentiments of the Association generally in saying that we are honored by having as our Vice-President, the Hon. J. D. Rolland.

Provincial Vice-Presidents.

The Secretary:—Mr. Lloyd Harris, of Brantford, has been elected Vice-President for Ontario by acclamation.

Mr. Harris:—I found on my arrival in Winnipeg that my reputation had preceded me. I found that the report had got about that I was capable of telling a story at any length. Unfortunately one of the Winnipeg reporters boarded the train at Kenora when I was very busily engaged in holding the attention of several members of our party, and he listened to me for 3½ hours and came to the conclusion I was the longest talker in the Association. That, I wish to assure him, is a mistake, and for that reason, you will please make a careful note that I have not raised my voice in this assembly until this morning. I wish to thank you, gentlemen, for the honor you have conferred on me for my election to the office of Vice-President for Ontario. I regret I have not as much time as I would like, to look after the interests of the Association, but although I cannot attend as many meetings as other members and officers, at the same time I am trying in a quiet way to further its interests on every possible occasion. I am personally engaged in a great many manufacturing institutions —in agriculture as well as mining and fishing. (Laughter.) If you think this out thoroughly you will find I am the greatest representative of industrial Canada at the present time. (Renewed laughter). I am President of a fishing club (laughter); I have cheerfully lost my money in trying to develop the mines of Canada (laughter); I have tried to run a farm, unsuccessfully (laughter); and, in fact, the only thing I seem to have been successful in is in manufacturing, and, therefore, I am confining my attention to the manufacturing interests of Canada and hope to largely extend them. I may say I have options on three or four choice manufacturing sites in Winnipeg which I hope to have occupied in the course of two or three months. (Laughter and applause.)

The Secretary:—Mr. G. A. Vandry has been elected Vice-President for Quebec.

Mr. Vandry:—Mr. President and Gentlemen, after the interesting speeches this morning, I find very little left for me to say, but I can promise you I will do in the future as I have done in the past, work to the utmost for the interests of the Association. I thank you for the honor you have done me.

The Secretary:—Mr. T. M. Cutler has been elected Vice-President for Nova Scotia; Mr. John Hendry, Vice-President for British Columbia; Mr. L. C. McIntyre, Vice-President for Manitoba.

Mr. McIntyre:—Mr. President and Gentlemen, I am not like my friend Mr. Harris; he wanted to speak—I do not. But I can assure you I feel proud of the office I hold in this Association. It does me good to be elected as Vice-President for Manitoba in this Association. While our Branch is one of the youngest in the Dominion it is still one of the most progressive. I have made so many friends among the members of the Association that I am afraid I will have to attend all future meetings. (Hear, hear.)

When it was first suggested that the Association should meet here little attention was given to the subject. But on looking into the matter, and into the work the Association has been doing in the last few years, I think every manufacturer in the West felt the importance of such a Convention. Our Branch in Manitoba is only in its infancy. We are adding new industries every day, and when our friend Mr. Harris decides on this property on which he has secured the options, we will have a fishing pond and other large industries, which he will manage, and we will be pleased to have him as one of our citizens and one of our manufacturers. (Laughter.) Our Branch when I became Vice-President, had only about 35 members. To-day it has 103. So I consider we are doing extraordinarily well. I do not take

any credit myself. We must give it entirely to our Secretary, who has worked zealously and faithfully to increase the membership. I hope these manufacturers from the East —they say the wise men come from the East—will prove a great benefit to the City of Winnipeg and to the Western Provinces. We will be pleased to see some of them come here and open up new industries. There is no Province that has the same opportunities as this Western Province of ours. We are filling up, I am pleased to say; we are taking some very good men from the East, and they are making the very best citizens. We are getting them, too, from the Old Country and the other side of the line. With this increasing population, we have one of the best cities in the country in which to establish industries.

I wish to thank the members of the Association for their kind appreciation of the little we have done for them at this Convention. We never had anything like it to do before and if we have failed in any way, I hope they will forgive us. I am sure all we did came from the heart. (Hear, hear.) It is a real pleasure to me to have you here, and if at any future time you re-visit Winnipeg, we will try to give you just as hearty a reception.

The Secretary:—I wish to announce the election of Mr. Chas. A. MacDonald as Vice-President for New Brunswick.

Mr. MacDonald:—Mr. President and gentlemen, a very short time ago, I would hardly have accepted this position, for various reasons. But I had the pleasure of being present at the Convention in Quebec last year, when Mr. Ballantyne was elected to the Presidency, and I have attended all meetings at this Convention, and I have watched him. It has seemed to me that a gentleman like that could not be at the head of an Association whose methods were other than handsome. When I looked at Mr. Ballantyne, it brought the words to mind, "let your light so shine upon all men." I am very pleased to accept the honorable position you have given me. I think New Brunswick is about the only Province which has not a Branch in the Association. Since you have honored me with this position I shall make it my business to form one.

Coming, as I do, from the East, from one of the seaport towns, I think that one of the greatest problems before us now, is that of transportation. To my mind it surpasses even the problem of tariff. You who live inland may know what proper transportation facilities mean to the country. I was very glad to see that resolution passed, that the preferential clause in the tariff should apply to imports through Canadian ports only. We have the ports by which we can do our own exporting and importing. While we do not wish to interfere with our neighbors, we just wish to repeat the motto which we all hold dear, "what we have we hold."

The Secretary announced the election of Mr. F. L. Haszard as Vice-President for Prince Edward Island, Mr. E. J. Brooks as Vice-President for Saskatchewan, and Mr. A. E. Cross as Vice-President for Alberta. Mr. George Booth was re-elected Treasurer, and Mr. W. C. Eddis, Auditor.

INVITATIONS FOR NEXT CONVENTION.

Mr. R. P. McLennan:—I have received a telegram from Mr. John Hendry, inviting the Association to hold its next Convention in Vancouver. I have great pleasure in extending this invitation on behalf of the British Columbia Branch. In inviting you there I may say we will do our very best to entertain you. The people of British Columbia wish the manufacturers to go there and see something of the Province. We had the pleasure of meeting you some three years ago. We still have strong recollections of that pleasant visit. Many of you are going there on the present trip, but the shortness of your stay will not permit you to see very much of British Columbia. It is a great consuming country; it uses a great deal of the manufactures of the East, and Vancouver is a port of entry for imported goods. Such being the case, we get a great many goods from other countries. This condition is worthy of your closest attention.

Again, our Branch there labors under the difficulty of being so far from the Eastern influences of the Association. I think the visit would do our Province good, and draw us all closer together. From a commercial point of view it would be money spent in the very best way. Outside of



MAJOR T. S. HETHERINGTON
(T. Hetherington)
Chairman, Quebec Branch, 1906-1907

that I assure you, you will have the heartiest and best reception it is possible for us to give you.

A Delegate:—I have very great pleasure in seconding the motion to hold the next Convention in Vancouver. Apart from sentimental reasons, I think that every manufacturer in Canada, if he studied the conditions from coast to coast, would realize that in British Columbia, Canadian manufacturers are at a greater disadvantage than in any other place Competition from the United States is keener there, and the Canadian manufacturer has to put up the hardest battle to sell his goods. Vancouver and Victoria have splendid hotel accommodation. If it is not possible to have the next meeting in the West, still we want to have the name of Vancouver to the front, so that the Convention may be held there at least the following year. I hope the Association will see fit to favor Vancouver.

Mr. Saunders:—I am not going to ask you to come to Goderich, but living on the western peninsula, within reach of Toronto, I am going to suggest the name of Toronto as our next place of meeting. It is some years since we met there; it is central; and it has ample hotel accommodation. It has one of the finest hotels in Canada. I have great pleasure in moving that Toronto be our next place of meeting.

Mr. Firstbrook:—I extend a most hearty invitation to the Association to meet in Toronto next year. I therefore have much pleaure in seconding the motion of my good friend from Goderich. I need not take up your time in enumerating the reasons why Toronto would be the best place for the convention in 1907. Toronto has ample hotel accommodation, and in the King Edward there is a beautiful banqueting hall. We have numerous other good hotels, and by the time of the next convention there will be the new St. Charles. We have a city of churches (laughter); it has at times been called Toronto the Good. I hope it has lost none of its goodness, nor is there any reason why we should not be called Toronto the Good.



Mr. Wm. Levis
(The Robert Taylor Co., Limited)
Chairman, Nova Scotia Branch, 1906-1907

There are various means of entertainment, such as trips to Niagara Falls and to Muskoka, which could be arranged. In connection with the Niagara Falls trip we should remember that the power plants will be completed by that time, and the members will have an opportunity of viewing these magnificent engineering feats which have been placed there at the expense of so many millions of dollars

I have a list here of other reasons which it would take three hours and a half to enumerate, but I will not take up your time reading them. I would just mention that out of a total membership of 2,004, there are over 1,200 members in Ontario. In Toronto alone we have 540 members or 45 per cent. of the membership of Ontario. We have also the head offices in Toronto, and we hope next year to have our new offices completed, and every member will wish to see the office for which he has to pay. I have pleasure in seconding the motion that the Annual Meeting for 1907 be held in the city of Toronto.

Mr. E. G. Henderson:—I am more modest in describing Toronto's charms, but I think we would make no mistake in going there next year. It is the most central place and we are assured of a cordial welcome. We have met in different parts of Canada—last year in Quebec, the year before in Montreal, and this year in Winnipeg, and I think we might choose Toronto next.

Mr. Harris:—When Mr. McLennan rose to his feet I expected an invitation from Dawson City, as he is an ex-mayor of that place, and I rather rejoiced until he mentioned Vancouver, when my heart sank. But there are two or three reasons for going to Vancouver. The first is because they have invited us; moreover we should go where we can do most good to manufacturing in general. I think we can do more good to the manufacturing industries by going there than by going anywnere else. Our friends interested in th lumber business know that that industry is not properly appreciated by the rest of the people of Canada. We should make it a point to learn the true facts about it and insure its success. Another reason for going to Vancouver, now that the invitation is extended, is that every Canadian should take all possible opportunities of traveling across the western half of this continent. We cannot cross this continent too often. It is a sad mistake to think that it is sufficient to see the West once every two or three years. Every six months sees great changes in the conditions and development. If I had my own way I would force every Canadian to cross the country as often as possible. For that reason, to learn what we can, I shall support the invitation from Vancouver; but in the meantime I shall move that the matter be referred to the Executive Council for consideration.

This was seconded by Mr. Ballantyne and carried.

The President:—It will probably be several months from now before the question is settled.

The Secretary made some announcements in reference to railway tickets and other matters of immediate importance to the members who would be leaving next day for the West.

The President:—There are no other announcements to make; the work of the Convention is over; I will ask you to rise and sing "God Save the King."

The national anthem was sung and the last business session of the 35th Annual Convention was brought to a close.

Trip to Western Canada Flour Mills.

On Wednesday afternoon a special train carried a large number of delegates out to the Western Canada Flour Mills. The various processes used in converting the grain into flour were seen in operation. The Western Canada Flour Mills are one of the great sights of the West, and the trip was thoroughly enjoyed by all who took part in it. The train returned to Winnipeg in time to allow the excursionists to enjoy the automobile trip around the city, as the guests of the Real Estate Exchange. The two-hour spin gave a fine opportunity to see all parts of the city.

MUTUAL FIRE INSURANCE COMPANIES ORGANIZED

A meeting of the subscribers to, and other members of the Canadian Manufacturers' Association interested in the formation of Mutual Fire Insurance Companies was called as the first meeting of the programme of the Annual Convention of the Association on Monday, 17th of September, 1906, at 11 a. m. Amongst those present were: Messrs. E. A. Doolittle (Orillia), Thos. Roden (Toronto), W. P. Gundy (Toronto), R. J. Whyte (Smith's Falls), John Stevely (London), Alex. Saunders (Goderich), Geo. W. Watts (Toronto), C. H. Bechtel (Waterloo), P. H. Burton (Toronto), A. L. Breithaupt (Berlin), L. W. Manchee (Toronto), W. B. Tindall (Toronto), W. R. Gurd (Montreal), Wm. Thoburn (Almonte), Wm. Stone (Toronto), Carl Riordan (Merritton), John Firstbrook (Toronto), W. K. George (Toronto), A. G. Northway (Toronto), A. S. Rogers (Toronto), Dan Wilson (Collingwood), H. Krug (Berlin) J. McClelland (Toronto), P. Paton (Collingwood), A. Jephcott (Toronto), G. A. Forbes (Montreal), Jas. Jephcott (Montreal), E. Fairbairn (Toronto), Jas. Maxwell (St. Mary's), C. Dolph (Preston), W. H. Rowley (Hull), Frank Kent (Meaford), F. G. Rumball (London), J. M. Gill (Brockville), Geo. C. H. Lang (Berlin), E. F. Hutchings (Winnipeg), R. J. Younge (Montreal), Jas. McLaughlin (Owen Sound), S. R. Wickett (Toronto), and about fifty others.

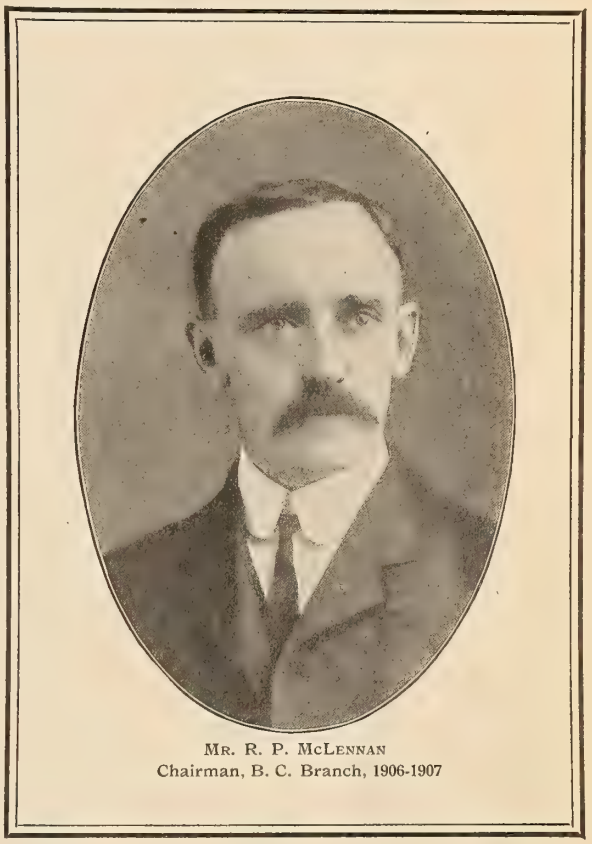
On motion of Mr. W. B. Tindall, Mr. P. H. Burton was appointed chairman of the meeting and took the chair.

On motion of Mr. Burton, Mr. E. P. Heaton acted as Secretary of the meeting.

The chairman in opening the proceedings said: Gentlemen, as I understand the matter, this is not actually a meeting of the Insurance Committee, but it is a meeting of those who are interested in the formation of Mutual Fire Insurance Companies by and for Canadian Manufacturers. The report of the committee itself to the Association will be discussed, of course, to-morrow morning. I do not know that I need make any remarks upon the subject, but will call upon the Secretary to give us a few facts. You are all business men and understand what we have come here together for. The object of the Association has been to try and obtain for the members of the Association cheaper insurance at a lower rate than we have been getting it at. It will take a long time to go over all the work done by the Insurance Committee, and as I have just remarked, the report of the Committee will be submitted to-morrow and you will have an opportunity of criticizing it. I understand this meeting is for those gentlemen who are willing to enter into an agreement among themselves to form one or more mutual Companies for their own protection. A number of circulars were sent out to members of the Association, and replies have been received to them. I think I had better call upon the Secretary to tell us how these questions have been met.

The Problem of Insurance.

Mr. Heaton:—Mr. Chairman and Gentlemen, the work of the Insurance Committee, in so far as it has led up to the position in which this matter is now before you, has been referred to by the Chairman. But I presume you will wish me to give you a few more facts than he has been able to give you and even trespass upon your time while I recite as briefly as I can more of the conditions and reasons that have led the Insurance Committee to make the report to the Executive Council which was approved by them at their March meeting, and which now comes before the Annual Convention for ratification. The problem how to secure for the members of this Association the best and cheapest insurance has for a year occupied a large part of the time and thought of the Insurance Department. It has entailed considerable traveling, visits to the leading centres of insurance industry in the United States, and of course, in our own country, and the results of these visits have been tabulated from time to time and presented in the form of written reports to the Insurance Committee, who



Mr. R. P. McLennan
Chairman, B. C. Branch, 1906-1907

have carefully considered them. These reports are on the table and if any of the members are interested enough to study the results and figures that are given, they are quite welcome to do so, but let me summarize what I have found as the result of my work. In the first place, there is but one Insurance Company in Canada, one mutual Insurance Company, whether Provincial or Dominion, dealing solely with one section or class of manufacturing risks. The Company I refer to is a company in Hamilton for the insuring of flour mills and grain elevators, and, being at home, our first action was to look into the record of that Company. The result of the investigation has already been sent to the members in the circular sent out on the 15th of June, in which the position of the Association in regard to mutual fire insurance is given. In that circular there is given a synopsis of the work and result of the "Canadian Millers." A practical demonstration of what has been accomplished by the only Company in Canada doing a class manufacturing business, is found in the statement that they have been

able to transact that business at a little more than one-half the rates charged by the tariff companies, and have set aside over $100,000 as a net surplus; in other words this Company has over $8.00 of cash assets for every dollar of liability.

The New England Mutuals.

Having determined that a class Company was being operated in Ontario with great success and advantage to the members of the Company, the next question was to ascertain just what had been the result of similar organizations in the large territory to the south of us where the system has been very much more popular and more extensive. Now will you bear with me while I describe briefly five separate classes or grades of Companies for insuring manufacturing risks, that are now operated in the United States of America, and I think it is necessary I should describe them to you to enable you to understand the situation. There are three grades of Companies more or less associated together and known by the name of the "New England Mutuals," that is to say, Seniors, Juniors, and those to which for purposes of convenience of reference I have applied the title of "Baby Juniors." The Seniors were organized so far back as 1835, the Juniors in 1870 and the "Baby Juniors" from perhaps 1885 to 1887. Now the class of business transacted by these Companies practically follows their age. The Senior New England Mutuals have the highest standard, both as to construction, occupation and protection, with the result that the cost of their insurance, both losses and expenses, is something in the neighborhood of six cents per $100 on the amount of fire insurance carried. Now it is manifest that nothing better can be done in the fire insurance world than the Senior New England Mutuals are doing for their respective members. I think we may take that as an absolute fact and conclusion. The Junior New England Companies are not quite as particular in the risks they accept, but they are still very high in their requirements both as to protection, occupation and construction. The "Juniors" have been able to transact their business for a number of years past at from 10 cts. to 12 cts. per $100. There is no question as to the financial standing of the Companies entering into the two classes just named. They are old, have magnificent reserves, have performed for their members unique features and results, and I think we may allow these two classes or grades to rest there. Turning to the "Baby Juniors" (that is a term I have coined simply that our Committee may understand better what I am talking about) they date approximately from 1885 or later. Being a newer class of organization, these companies must necessarily write an inferior class of risks to the Seniors or Juniors, and yet they require a full and adequate system of automatic protection. The result of this baby class of Juniors is that they have transacted business at a cost of from 18 cts. to 20cts. per $100. Now they also have shown in the period in which they have been organized, results as marvelous as the Senior Mutuals, and perhaps I cannot do better than give you the result of the work of this class of Company in an illustration which came under my notice last week. In dealing with the risk of one of our members, I found that the insurance carried in the Juniors and "Baby Juniors" to be approximately one million dollars. The cash payment for the first year was a little over $10,000.00, the cash return at the end of the year was 86% of the original premium, so that the net cost to the assured for this particular case was about 16 cts. per $100 on the entire million dollars of insurance. I am afraid to tell you what the tariff rates or the non-tariff rates applicable to that risk were, but this is the actual fact which came under my notice last week and confirms the theoretical study we made throughout the year.

Following these three sub-divisions of the New England Mutuals, and I think we may take it for granted their insurance is absolutely satisfactory, we come to a further class that may be known as "Class Mutuals." By that I mean Companies formed for a particular class of business, as, for example, for lumbermen, millers, tanners, retail lumber yards, retail hardware and dry goods. I have not investigated the retail companies because that is not part of our business. We have gone into the working of companies formed for the purpose of insuring classes of manufacturing risks and I have before me the actual results for the last fifteen years of each of the Companies in the United States insuring a particular class. These are briefly the facts. These companies were organized between 1887 and 1895. Their average loss ratio in the whole period of their existence at tariff rates has been 25½%, their expense ratio has been a little over 7%, and they have returned to their Policyholders an average of a little over 50% on the tariff rates and each of these Companies, as you will see by the records, if you care to study them, has in that period accumulated net reserve funds over and above all their liabilities ranging from $25,000 to over $100,000, so there was nothing left to our Committee but to express the opinion that Companies formed for the insurance of particular classes have been successful.

A Delegate:—Are these classes outside of what the New England Mutuals would take?

Class Mutuals Impractical.

Mr. Heaton:—Yes, or they have not reached the standard of protection required by the Mutuals.

We were, however, compelled to face the fact that a class Mutual could scarcely be operated with advantage in Canada, because the number of eligible risks of a particular class is not sufficient to support a Company organized to insure the risks of that particular class, even although the "Canadian Millers" have demonstrated that a Company can be conducted in their own line with phenomenal success.

But that we might get nearer to the ideal we had in mind, I was called on to investigate a series of Companies insuring "sub-standard" risks, those are the risks that are not eligible for insurance in the New England Mutuals, but which by reason of construction, occupation, protection or care in management, are entitled to some better consideration than the tariff and non-tariff companies customarily grant to such risks. That is what I term a sub-standard risk, and I think the Committee share the conviction that the eligibility of this class of risk for Mutual Fire Insurance may be determined more by the character of the management and record of the firm, than by the mere physical hazard. That is a matter, however, that will be fully considered in the working out of the details of the organization. I have before me a full record of the Companies studied in the course of my visits to the United States. You will see how elaborately they are prepared, and will readily perceive that it is impossible I should read them fully to you. I will, however, give a short summary, as follows:

For six companies organized between 1865 and 1904, the average loss ratio on the tariff rates has been 34%, the average expense ratio 12%, and the average return to the assured in these sub-standard mutuals about 53.4%. And

these six companies have a net surplus ranging from $20,000, (and may I interpolate here that the youngest company was organized three years ago under the auspices of the members of the National Association of Manufacturers of the United States, a similar body to our own in the republic to the south), to $759,570, the reserves accumulated by the oldest company since its organization in 1865. Pursuing this line of thought further, the oldest company I have spoken of, was, as indicated, organized in 1865, and last year transacted its entire business upon a basis of 40% of the rates charged by the tariff companies, and set aside to their reserve fund a sum of over $100,000. These facts have been presented to and studied by the Insurance Committee, in conjunction with the fuller reports I was able to lay before them, and they seemed to have no option but to reach the conclusion that the companies which have been eminently successful in the same line of business on similar risks in the United States may safely be organized here for the members of this Assciation and for manufacturers, and it might be confidently expected that results somewhat similar to those which have been referred to as attending the operation of companies in the States would follow the operation of our suggested Canadian companies.

A Mutual Company Recommended.

Therefore they recommended to the Executive Council that three companies should be formed, first the company to work in affiliation with the New England Mutuals, particularly with those characterized as the Juniors and "Baby Juniors." This Company we are not discussing to-day because we have not formulated its principles or plans, nor have we attempted to bring it to a state on which organization is possible. That, however, will come in the course of the year, and will form part of the work of the incoming Insurance Committee. They further recommended that two companies should be formed, one in Toronto and one in Montreal. The conditions on which they recommended these companies to be organized were recited in a form of agreement sent out with a circular letter, entitled "Mutual Fire Insurance" to all members of our Association. The Insurance Committee did not feel justified in spending any money in seeking a personal canvass but felt if the members wanted insurance of this character, they would sign the accompanying agreement or otherwise show their willingness to join in the scheme. I am glad to tell you that the number of responses was exceedingly gratifying, as we received at our office altogether 304 definitely signed agreements, and we have received some since coming to this meeting, promising insurance in these companies to the extent of $2,400,000, or a little over, in each of the two companies. (Applause). In addition to that, we have received over 50 letters from members which I have not felt justified in including in this list of definite promises which, while promising co-operation, intimate that they do not care to sign the agreement, preferring rather to see how the companies are organized. I think we may safely place the number of those who have promised one way or another to support these companies as being over 350. From the best of my experience and knowledge I believe when these companies are organized we shall be able to start with a minimum insurance of one and one-half million dollars on risks eligible for insurance in the class of companies it is proposed to organize.

I would like to add that one objection, and only one has been raised by our members to these two companies, and that is that the amount of insurance these two companies will be able to carry in the ordinary course of their business is too small to have any effect on the insurance situation. In the agreement sent to you it was specially pointed out the limit on any one risk at the inception would not be more than $5,000. Our Committee thought that we should err on the side of caution and safety rather than jeopardize the life of the company, as if a loss occurred on a risk upon which larger liability had been assumed, the result might be exceedingly disastrous; thus they thought $5,000 should be the maximum line our companies should carry. Some of our members have said that $10,000 was so small an amount that it was not worth while taking an interest in the companies because the sum was so insignificant. That is the only objection that has been made since the matter was first discussed. Our answer is, mutual fire insurance by and for manufacturers in Canada is a new development. If we are to organize at all and lay down a system that will



Mr. J. S. N. Dougall
(McCaskill, Dougall & Co.)
Chairman, Montreal Branch, 1906-1907

ultimately take care of our members, we must make a start (hear, hear). If we make a start we had better do it on safe principles. Consequently we say to these, if you wish to make a start in organizing a system that cannot fail to be of material benefit to you, do not let the amount at the start prejudice you in the determination whether or not to act with these two companies.

Amendments to Insurance Act.

It may not be known to members that the Dominion Insurance Act does not at present favor the organization of mutual fire insurance companies. In the various Provinces it is possible to organize either mutual or cash mutual companies, but our Committee have felt we should only go to the fountain head, and get our charters direct from the Dominion Government. Then we run up against the fact that the Dominion Insurance Act does not favor your promoting the organization of mutual insurance unless a sum is deposited with the Government similar to

what is required by a joint stock company, and a stock company of even mature age,with tremendous liabilities on its books. It will be one of the first duties of the Committees appointed to further these organizations to see that at the forthcoming session of the Dominion Parliament the influence of this Association is exerted to the fullest extent to get such amendments to the Insurance Act as to permit of the organization and licensing of mutual insurance companies. While it might be difficult for a gathering of individuals to secure such amendments as would permit of the organization of mutual companies our Committee are of the opinion that if you endorse the work they have done, and the Association endorses it enthusiastically and emphatically, that the Dominion Government will yield to your wishes, and at the forthcoming session of Parliament will so amend the act as to provide for the organization of companies on safe and prudent lines.

I am ready and shall be glad to answer questions that may be put to me. Our Committee do not hesitate to declare to you they believe the formation of these two companies will usher in a new era in connection with manufacturers' insurance business, and they hope and believe that their proposals will so commend themselves to the majority of our members as to secure their general support and co-operation. (Applause).

The Chairman:—I think you will agree with me that we have had a very complete résumé from the manager of the Insurance Department of what we have been doing. There have been those in the Association who thought we did not go fast enough, but the more we looked into the question, the bigger we found it. We felt all along the great thing was safety, and we have proceeded warily and come to the conclusion that the mutual plan is undoubtedly the best. With regard to the small amount we propose to take from each party, think back to the statement made that these Senior Mutuals who are able to do the insurance at 6c. for $100 began in 1835. Now I suppose we are not going to live for a corresponding period, but still we want to lay the foundation for companies that will have a prospect of lasting and growing year by year, and therefore we have been as conservative as possible. I may say the object has been all along not so much to sell insurance, as people who are in the insurance business say, but to prevent losses, and by careful and good management give to manufacturers something worth having at a very low price. If there are any of you who have any remarks to make, we shall be glad to hear them now. (Applause).

Mr. W. H. Rowley, of the E. B. Eddy Co., Hull:—Mr. Chairman, I should like to ask whether you have conferred with the managers of the New England Mutuals, and whether the Canadian Manufacturers' Association Companies in the field in Canada will in any way prejudice our position, that is the position of the assured, with the New England Mutuals; will the latter consider, in other words, that we are trying to take business out of their hands and oppose us, or will they look upon us favorably?

In Harmony With New England Companies.

Mr. Heaton:—We have not only discussed this matter with the New England companies at their respective homes, but we have correspondence from them, and they are welcoming the inauguration of a company in Canada that will work in affiliation with them, as while they expect it will result in the detachment of a small portion of the insurance carried by them for the benefit of the Canadian Company, they will receive more than an equivalent; they therefore not only endorse our work, but are ready at any time to assist us in organizing, that we may be constituted on such lines as will permit them to work with us. That applies to the Juniors more than the Seniors. I have letters on my desk which we will print and distribute at a later date so that the members will have the entire correspondence before them, and be able to judge for themselves on the printed record.

Mr. Rowley:—Then in that case, that does away with the great objection raised by some of the members to the smallness of the amount which Canadian manufacturers can place in these companies—$5,000 apiece. If that is so, the only objection would be as to the actual smallness of the policy.

Mr. Heaton:—My remarks in regard to the smallness of the amount applied more to the sub-standard companies than to the standard companies. With the standard companies we have no difficulty, because the risks upon which that company would write are now in the New England Mutuals, but in regard to the sub-standard companies where only $10,000 can be placed, and our members carry say $100,000, there is, it is thought, much too small a proportion that can be carried by the proposed companies.

Mr. A. E. Rea, of Toronto:—I understand the Dominion Government has no opposition to this mutual plan, but the thing has not been brought adequately before them. Is not that the case? They are not in opposition to the principle.

Mr. Heaton:—I would scarcely like to commit the Government to any expression of opinion on this subject, (laughter), but from what I have heard from responsible sources I think they will be quite prepared to receive a deputation from this Association, and with all the particulars we can give them concerning the working of similar companies in other places, though it is pre-supposed they will not commit themselves to any definite course, I believe the representations of this Association will be cordially received and well considered.

Mr. John Firstbrook of Toronto:—Is it not a fact that it will be necessary to overcome the influence of the Superintendent of Insurance in order to have the Government change the law? I understand the Superintendent of Insurance in the Federal Government is opposed to the very fullest extent of his ability and influence to mutual insurance of any kind, both life and fire.

Mr. Heaton:—In reply to Mr. Firstbrook, perhaps existing conditions may have changed the Superintendent's views, (hear, hear, and laughter).

The Chairman:—At any rate we are not going to give up the fight without making it.

Mr. J. McLaughlin, of Owen Sound:—I am very pleased with the information given, but as a manufacturer in this Association, I wish it were possible in confirming this insurance company, even on such a small scale, to remain entirely independent of affiliation with the cousins across the line. I think it is a kind of weak point to go over there and ask assistance when we want to start business in our own quarters. I strongly favor even $5,000 for each company, but I think we ought to stand upon our own bottom and not go over there.

Mr. Heaton:—May I say in reply that the Insurance Committee have most pronounced views on the desirability of keeping insurance in Canada, and I am sure they will well consider the suggestion thrown out by Mr. McLaughlin.

Mr. W. Thoburn, Almonte:—I have been unfortunate in not hearing all the discussion. I was one who did not sign the documents sent about insurance. I could not see

the actual necessity of forming two companies, and I was not present perhaps when that part of the insurance was explained, and I would like to hear it explained why two companies are necessary in our manufacturing department.

Two Companies Preferable.

Mr. Heaton:—The view of the Committee and the Department in respect to this matter is that both in Montreal and Toronto there are large interests, and that it will be well, in order to produce the best results, to have a company located in Toronto which will have at its back all the western interests; and one in Montreal which will have the eastern influence at the back of it; that for two reasons, first that two companies would be stronger than one would be, and would be able to carry two lines of $5,000 each and not one line of $5,000; and secondly because if we are to lay a basis for a scheme or system it is well to have the support of the entire Dominion, and we think in the arrangement of the two companies, with head offices in the two chief cities of the Dominion, we shall best ensure that result.

The Chairman:—We are only following out the principles of the New England Mutuals. How many companies are there in the Seniors, Mr. Heaton?

Mr. Heaton:—There are probably 10 or 12 companies in the Seniors, some in Providence, R. I., some in Boston, Mass. thus operating as it is proposed we should. You will find the Juniors scattered as far west as Illinois, including Maryland and Pennsylvania. It is found to be a more practical working of the mutual insurance scheme if the interests are scattered, thereby insuring greater care and financial responsibility of the firms that insure with them. That is one reason why it is thought we should have these two offices.

Mr. Hutchings:—Regarding the two companies I think you are doubling the expense, when one company could do the business of the two just as well. I do not think the influence of the east and west would clash in this matter at all. I believe as manufacturers, whether east or west, we are Canadians and if we are going into an organization of this kind, we ought to stand together. I think we ought to start with one good solid company. If afterwards we find the need of the baby companies, bring up the family in that line.

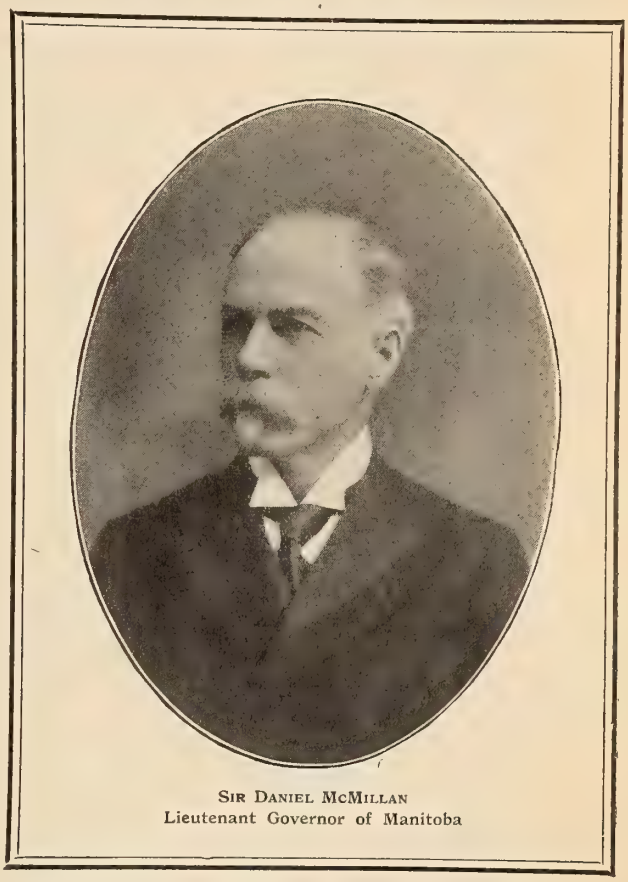
The Chairman:—I think there is a resolution to come on here, and to partly meet the case. It is proposed that there should be a certain number of the directors on both companies. In Montreal alone there are enough to form a company, and as Mr. Heaton has said that you can get a local company that will probably look after your risks better, and we do not propose to remain at $5,000 for long; that is only for a start.

Mr. W. Thoburn:—It seems to me that two different companies should be carried on as branches under one company, as our Association in fact is. It should be clear to every one of us, that with one head company, with agents in every city, insurance can be cheaper than by running two companies, with their offices and staffs of servants. I do not see why it should not be under the head of one company just as all large insurance companies are carried on all over the world. I never heard of companies being divided so as to have a head office in different cities. They have generally one head office with branch offices in different places. Why should not ours be organized on similar lines?

Mr. Heaton:—I should like to say that those who are acquainted, and I think Mr. Thoburn is, with the details of the management of the New England Mutuals, will recall that while their respective head offices are in different cities they are practically united for inspection purposes and as a result they secure a minimum of expense in organization, and control of the business. I am satisfied the Insurance Committee have organized the provisional directors so well that any scheme formulated in carrying out your wishes will be based on the one essential of a minimum of expense.

Mr. Carl Riordan, St. Catharines, Ont.:—Can Mr. Heaton give some idea of the expense of the New England group as compared with one company? I suppose it was for purposes of dividing the risk among different groups.

Mr. Heaton:—And also to save expense in the administration. In the New England Mutuals you will find that



Sir Daniel McMillan
Lieutenant Governor of Manitoba

so far as inspection is concerned, no matter where the head office of the company is situated, they are made from Boston, Providence or Philadelphia. These inspections are sent to all the companies, thereby accomplishing unity of action at a minimum of expense. The sub-standard companies, at the time I investigated them, were associated together for inspection purposes under the title of the National Factory Mutual Insurance Association. At this time last year this was composed of 6 companies with head offices in different cities, but though following the principles of the different offices in the New England Mutuals, operated together for the purposes of reducing expenses in the details of their work, and during the year this has been so successful that 7 other companies have been added to that particular syndicate, thus centralizing the work of inspection while each retains executive individuality.

Mr. S. W. Ewing, Montreal:—It seems in reference to the "Babies," we have appointed the Insurance Commit-

tee, which has done great work, and I think it would be a mistake to alter their work in any way. They should now know more about the work than any of us here on the floor. We know these companies in the United States have done fine work, and if it is the best thing to do, let us have two companies as advised by the committee, who have worked at this subject now for over a year.

Advantage of Concentration.

Mr. J. Le B. LeMaistre, F.R.C.I., Gaspé:— Mr. Heaton has given us a reason for having two companies, that it will permit two lines of $5,000 being taken, which will be the larger amount, but I place before you the fact that if you have one organization alone, a large organization, you could equally take $10,000, therefore you could take the same amount in one company. Then as regards the supervision, I take it that the company would be careful to select their directors from the various provinces, that is to allot to each province or department a certain number of directors, and by that means they could exercise supervision and have the knowledge of their local circumstances, of which Mr. Heaton made a great point and in which we all agree. On the whole, I think one organization which would be important enough would carry more weight than two small ones.

The Chairman:—To illustrate let us take, for instance, this position. We have the Dominion and the Provincial Governments—I do not know whether we have not got too many Provincial Governments—but is the government of this country carried on more economically because we have got one Dominion Government and then a branch, if you like to call it, than if each Province carried on its own government?

Mr. Aird:—I am afraid not.

Mr. Heaton:—While there are two companies there will be, more or less, members in each Province who desire that their insurance be centered in one of the two companies. We have a number of responses to these circulars from men who say they prefer their insurance to be placed in their own company. So there must, of necessity, be individuality in each company, thereby each strengthening the other.

Mr. A. E. Rea, Toronto:—If the Mutuals form organizations to keep down the expenses, why should we form two companies and try to do what they try not to do? If we had the head office in Toronto and one in Montreal this would act in the matter of inspection.

Mr. William Stone, of Toronto:—Is it intended to limit the insurance to members of the Association, or to take in any manufacturers?

Mr. Heaton:—I think that is a detail the provisional directors will have to consider very carefully. The Insurance Committee have not felt justified in laying down a ruling on that matter.

Mr. Stone:—Is it the feeling that the insurance companies should be outside the charge, as it were, of the Association, so far as finances go?

Mr. Heaton:—Yes.

Mr. A. Jephcott, Toronto:—After hearing the lucid explanation of the work given us of the Insurance Committee, it is now my pleasing duty to move the following resolution: "That this meeting heartily endorse the recommendation of the Insurance Committee, confirmed by the Executive Council at its March meeting, in respect to the formation of mutual fire insurance companies by and for Canadian manufacturers." This you will recognize is merely a formal resolution, and calls for little comment from me after the explanation Mr. Heaton has given to us. This resolution does not touch on the question of one or more companies. It simply endorses the establishment of mutual fire insurance companies generally. I therefore will not take up any unnecessary time, but I should like this resolution to be endorsed in a very enthusiastic manner. The committee have worked very hard, and particularly during the last 12 months, on this subject, and we have individually the endorsation of many of our members. But now at this meeting we should like to have a very enthusiastic endorsation from the whole body (hear, hear). I trust, therefore, Mr. Chairman, that you will call, and that the meeting will respond very enthusiastically to this resolution.

Mr. John Firstbrook, of Toronto:—I may confess I am not among the 301 although I had in mind that if these companies were formed I would be a supporter of them. I was at the Executive Council meeting in March last, when they unanimously approved of the recommendation of the Insurance Committee, and this resolution comes before us not only as a resolution to-day, moved by Mr. Jephcott and seconded by myself, but by the endorsation of the Executive Council. We therefore submit it for your approval.

Mr. Harold G. Muntz, of Toronto:—Your resolution says by and for the Canadian manufacturers. I understand these two companies were to be distinct from the Canadian Manufacturers' Association, and not controlled by the Association itself.

The Chairman:—It does not say so. The Chairman then re-read the resolution, and continued: We should really like to have a hearty endorsation of this meeting for what we have been working at for the last two years. Anything that has been said here we shall be glad to give our attention to a little later on. If you feel we have been moving in the right direction and come before you with what you think is the best thing, let us have a hearty and unanimous vote.

The resolution was carried unanimously amid general applause.

Decide to Organize.

Mr. Dan Wilson, of Collingwood:—Mr. Heaton has explained at this meeting that the Act does not give us power to organize without a deposit. I have pleasure in moving "that this meeting is of the opinion that the proposed mutual fire insurance companies should be organized under the Dominion Insurance Act and by charters derived from the Dominion Government. As it, however, appears that the Insurance Act does not at present afford reasonable facilities for the organization of such companies it is requested that the Executive Council of the Canadian Manufacturers' Association through the Insurance Committee, make every effort to have the Insurance Act amended at the ensuing session of Parliament so as to permit the licensing of mutual fire insurance companies without a deposit with the Government, but under conditions that will ensure safety in administration and in the security offered the policyholders."

Mr. Fairbairn, of Toronto:—I second that.

The Chairman:—The resolution has been moved, and it has been explained to you that in this we want the support of the Executive Council and then the support of the Manufacturers' Association, and we believe that with that support we can go to the Government and get what we are asking for. If we cannot get all we are asking for we will get all we can, and whatever we get you may depend upon it we are in the business to stay and will push it through to the best of our ability.

Mr. Ewing:—If the Dominion Government refuses can we go to the Provincial Governments.

The Chairman:—I think we will make up our minds after we get the refusal.

The resolution was then put and carried unanimously.

Provisional Directors Named.

Mr. S. H. Chapman, of Toronto:—Following the resolution receiving the unanimous support of this meeting, in view of the report made to us by the manager of our Insurance Department, I have pleasure in moving the following resolution as to the personnel of the Provisional Board of Directors for these companies. In doing so, I only wish to say that I feel sure we all feel our Insurance Committee have done noble work for us during the past season in bringing this thing forward to the stage they have, and I think we all feel very much depends on the management of these companies when they are formed. I think when you hear the list of names chosen, you will agree with me as to the wisdom of our Insurance Committee in making the choice they have, and I think that with such directors, success is sure to follow their efforts. The resolution I have pleasure in moving is as follows: That the following named gentlemen be and they are hereby appointed the Provisional Boards of Directors for the two Companies it is proposed to organize, and that the fullest possible powers be conferred upon them in connection with the completion of the said organization.

Toronto Company—P. H. Burton, Chairman, Toronto; G. C. H. Lang, vice-chairman, Berlin; J. D. Flavelle, Lindsay; W. M. Gartshore, London; W. B. Tindall, Toronto; A. Jephcott, Toronto; G. Frank Beer, Toronto; W. H. Mason, Toronto; J. W. Cowan, Toronto; J. H. Burland, Montreal; Hon. J. D. Rolland, Montreal; T. M. Cutler,, Halifax; T. H. Estabrooke, St. John; B. E. Betchel, Waterloo; Dan Wilson, Collingwood. Montreal Company—J. H. Burland, Chairman; Hon. J. D. Rolland, vice-chairman; J. J. McGill, Charles Gurd, S. W. Ewing, Jos. Allen, C. C. Ballantyne, Montreal; P. H. Burton, Toronto; J. D. Flavelle, Lindsay; Geo. E. Amyot, Quebec; W. H. Rowley, Hull; T. M. Cutler, Halifax; T. H. Estabrooks, St. John; G. W. Ganong, M.P., St. Stephen; Walter Blue, Sherbrooke.

I may say ten names are from Ontario, given in connection with the Toronto Company, and five outside, and vice versa, ten names from Quebec and five from outside, so that insures a community of interests in the two companies. I have very much pleasure in moving the adoption of this resolution.

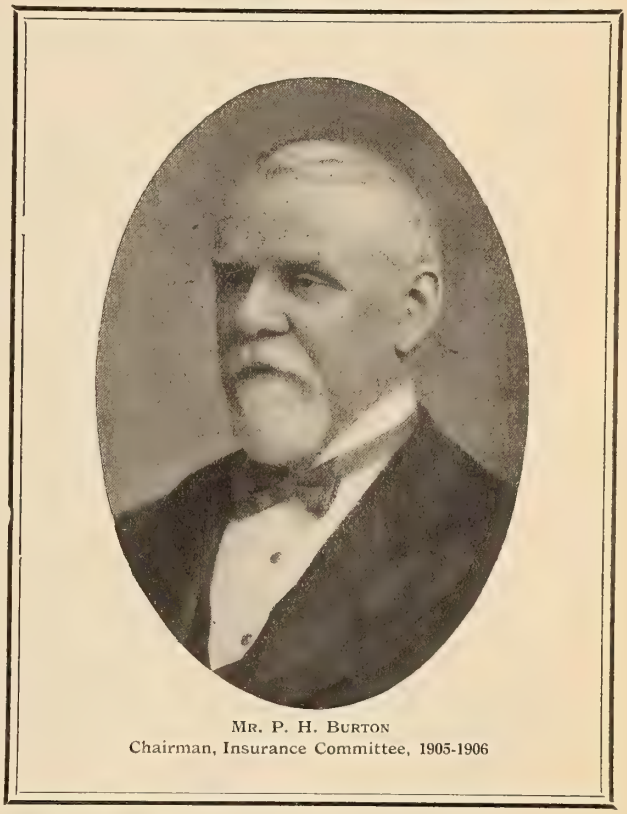
Mr. Doolittle, of Orillia:—I have much pleasure in seconding the resolution, after what has passed this morning, and as I understand it, the two boards will actually act in conjunction and they will, literally speaking, be one in their interests. I also feel that the time will not be long before the west will have to be represented (hear, hear), so that you understand we will be united. I do not think it is necessary for me to state further, as I understand it, the feature of these two organizations.

Mr. Heaton:—I will read the names of the committee. In suggesting the provisional directors the commitee have selected the names of gentlemen who are constantly passing through Toronto and Montreal, and who can therefore be readily got together at short notice. Otherwise there would have been representatives from Manitoba and British Columbia. These are the names. (The secretary re-read the list).

The Chairman:—Gentlemen, you have heard these names and the resolution. Is it your pleasure that these gentlemen should be named as the Provisional Directors?

Mr. W. Thoburn:—Would it not be well to have a representative from the city of Ottawa?

The Chairman:—Mr. Rowley is from Hull.



Mr. P. H. Burton
Chairman, Insurance Committee, 1905-1906

Mr. Thoburn:—I do not think a city such as Ottawa should have been left out from that list.

Mr. Heaton:—Unfortunately we had only two responses from Ottawa and our selection was therefore somewhat limited, but one of the gentlemen is on the comittee, Col. Burland, representing the British American Bank Note Co.

The Chairman:—The selection is made from those gentlemen who have replied to the forms sent out.

The Chairman put the resolution, which was carried unanimously.

The Chairman:—That will be all the business. If any gentleman has not signified his intention to become a participator in these companies, Mr. Heaton will be happy to receive his application.

The meeting closed at 12.40 p.m.

THE CONVENTION BANQUET

A Brilliant Closing to a Successful Meeting.

On the evening of Wednesday, September 19th, the members marked the close of the Convention by a banquet at the Royal Alexandra. The ample dining-room of the big hotel was taxed to its utmost to accommodate the guests. Almost four hundred were seated around the tables when the banquet began.

The banquet hall, as the guests entered, presented a striking spectacle. From the lofty ceilings, arched with beams of oak, was shed soft light from numberless clusters. The tables were decked with vari-colored candlebra, shining on the glittering tableware, and revealing a scene of rare brilliance.

Around the head table sat a notable gathering of Canada's manufacturers and public men. The newly elected President of the Association, Mr. Harry Cockshutt, presided. To the right and left of him were the Hon. R. P. Roblin, the retiring President, C. C. Ballantyne, L. V. Dusseau, S. W. Ewing, S. Walker, M.P.P., K. W. Rowley, Hugo Ross, G. W. Watts, Mark Fortune, Hugh Sutherland, W. B. Tindall, Alex. Haggart, K.C., P. H. Burton, Hon. J. H. W. Agnew, G. A. Vandry, Edward Brown, R. P. McLennan, Andrew Strang, Lloyd Harris, Mayor Sharpe, W. K. McNaught, C. C. Craig, M.P., W. K. George, Hon. Colin Campbell, E. L. Drewry, D. A. McDermid, Hon. Robert Rogers, R. J. Younge, T. S. Hetherington, T. W. Taylor, J. T. Gordon, M.P.P., L. C. McIntyre, F. R. Oliver, John Firstbrook, Charles McDonald, W. E. Nicholls, Hon. D. H. McFadden, J. R. Green, C. N. Bell, J. S. N. Dougall, Ald. Fred. J. C. Cox, and Robt. Gardner.

An excellent menu was served, after which the President opened the toast list.

The President proposed the toast of "The King," which was duly honored.

The President's Inaugural Address.

Mr. Harry Cockshutt:—Let me say to you to-night how much I appreciate the honor you have done me by electing me to the office of President of the Canadian Manufacturer's Association. I greatly value the confidence you have placed in me, and thank you most heartily for this expression of your esteem. I will endeavor to promote the work of the Association to the best of my ability, and hope that I may fill the position worthily.

It is not necessary for me to make a lengthy address to you this evening, nor do I propose to tell you what we expect to accomplish for the Association during the coming year. I would simply say that we shall give all matters, that concern the welfare of the Association, our very best attention, and we shall allow our actions throughout the year to speak for themselves, and sincerely hope that the Association's present rate of progress and success will be maintained.

We have in this age of inventions automatic machines which do almost everything except think. They do not need brains. But a man does; and to-day it is necessary for everyone to be either a man or a machine. At the present time this country is enjoying an era of great prosperity. We find advancement and progress on every hand, and it is true that nearly every section of the world is experiencing and profiting by improved trade conditions. If, as previously stated, we are to be men, and not machines, it is necessary that we think, in order to work out the problems that are before us, not only in an industrial way, but also in a commercial and national way.

Avoid Provincialism.

The idea has frequently occurred to me that we in Canada are apt, sometimes, to think that our own Province, or section of the country, is the best, and our Legislatures have, to a certain extent, been going upon that idea. To-day we find that in place of nationalism, there is a certain amount of provincialism creeping in. This is not in the interests of the country at large.

We are a new country, and we should be big enough and broad enough to recognize the fact that a doctor who is good enough to treat us as patients in the city of Montreal should also be good enough to treat us as patients in the city of Toronto, or in the capital city of any Province in the Dominion. Such, however, under existing laws, is not always permissible; and this is just one instance of provincialism, which, in place of being of material benefit to the country, is a hindrance.

What applies to the medical profession applies to the legal profession; what applies to the legal profession applies also to the commercial and industrial activities of this country. A company doing business with a Dominion charter is called upon to take out licenses to do business in nearly every Province of this country; and you all know how badly the insolvency laws work, as they now stand. We need a Dominion measure. Illustrations such as these show you how hard it is to stem the tide when once ideas begin to form in these narrower channels. Therefore, I believe that provincialism is one of the rocks that we in Canada should avoid.

The West Broad and Liberal.

Out here in the West it is possibly not so marked as it is in the older Provinces, and you, who reside here, can do good work for all Canada by showing the way—treating all subjects upon which legislation is necessary in a broad and liberal spirit—so that all Canadians, whether in Halifax or Vancouver, may be on the same footing in each and every Province and County of this splendid country.

We are gathered together here this evening for our annual banquet, which marks the close of another Convention—a Convention which has been successful to a marked degree, in which the reports have been uniformly good, and from which beneficial results for the C.M.A. will no doubt be obtained.

To-night we have the same population in Canada as the United States had one hundred years ago, but conditions have changed. During that century of progress there have been evolved and brought out many inventions of benefit to the whole world. Consider, for instance, transportation. To-day you might almost say that it precedes civilization. We have the railroads of this country building a network over it even before the settlers come in and have time to cultivate the soil. It would be safe to say that there are more comforts to be procured in a town six months old in Canada's West to-day than could be procured in the early days when Winnipeg was becoming a city. This, Sir, is accounted for by the fact that we are living in an industrial

age, and one in which men are ever trying to gain supremacy by bringing out the very best possible kind of product with which to serve the people and capture the trade of the world.

Working Out Industrial Problems.

We in Canada have many subjects on which we hold divergent views, but because we do hold such views in opposition to one another, it does not mean that we despise our adversary. We sometimes regret that statements are made and published that do not bear out the facts of the case; and perhaps no body of men has been more unjustly criticized than our own Association. It has not been done, perhaps, with a view to injuring us, but, to a greater or less extent, for the purpose of making political capital out of ideas that are really non-existent. We are not complaining. We are willing to stand our knocks, and are able to face our opponents in the open fields, or with our backs to the wall. What we have to say to our critics (and they are growing fewer) is, that we are manufacturers, that we are working out our own problems, and trying to solve our own difficulties. Our Association has been non-political, and, so far as my presidential term is concerned at least, will remain so.



A Corner of Winnipeg's Public Park

The manufacturers have, as you know, made immense investments in plant and machinery, costing nearly $500,000,000, producing nearly $500,000,000 of goods, employing hundreds of thousands of hands ,and paying out in wages annually $114,000,000. These employees, in turn, consume many millions of dollars worth of farm products. Did you ever realize how closely we depend upon one another? Under these circumstances we ask that the industrial interests of Canada be carefully safeguarded, and that the Canadian markets be to as great an extent as possible saved for our own people, and where this is not possible, that the Mother Country and sister colonies have the first privilege of refusal before passing our trade on to foreign nations.

A Diversity of Interests.

It has been demonstrated that it is necessary to have diversity of labor and industry to make a great nation, to develop and sustain a great people. Never was this better illustrated than it is at this time of the year in Canada, when the vast wheat fields demand increased labor for harvesting the crops. At such times the maximum of help is urgently needed, and then we organize great excursions and draw upon the supply of workers that are employed in the other great industrial centres of Canada. These would not be forthcoming were it not for the fact that at other times of the year diversity of employment holds them in other sections of the country. Agriculture, manufacturing, lumbering, mining and fishing have been, and will likely continue to be, the foundation of Canada's advancement.

Gentlemen, we are young as a country, and many of us are still young men, but we have lived strenuous days, we have fought a hard fight, we have our country's prosperity at heart, and, as I said before, we must be either men or machines. We prefer to be men, and prefer to think that Canadians will always stand for the development of everything that will promote trade and commerce, and build up the physical and moral character of the citizens of our country. We can afford to be broad, and we can afford to be liberal, and to educate our people on the very best lines, and to help humanity advance on the very best possible scale.

If this is accomplished we shall feel that the industrial life has been benefited, that our industrial markets will be enlarged, and that our country will advance in health, wealth, and happiness. Let everybody share in the material progress that is being made, and push forward with determination, aroused by the inspiration that our country will go on to greater and better things. We cannot rest satisfied of our future; we must work it out. Again let me say that the Canadian Manufacturers' Association is performing a great work, and will continue to perform it, not only for the members of the Association, but for Canada as a whole.

In closing let me thank you again for all your kindness to me, and the courtesy that you have extended to me here this evening.

We have many prominent men with us, who represent the thought and actions of the different constituencies of this country, and we shall take much pleasure in listening to them.

Mr. Braxton Smith sang acceptably.

Presentation to Mr. W. K. George.

Mr. Ballantyne:—Mr. President, before you proceed with the toast list this evening I am called upon to perform a very pleasant duty. It occurs to me that we have been hearing a great deal during the Convention just closed about our glorious Dominion; how rich it is in minerals, forests, mines, and everything else, but, Sir, while I have

been sitting here to-night my thoughts have gone back to some of the older men of Canada, and it occurred to me that it would not have been possible for us to have held our thirty-fifth banquet in Winnipeg if it had not been for that great statesman, Sir John A. Macdonald. (Loud cheers.) I wish it understood that any references that I make to public men have no political significance whatever. (Hear, hear.) All prominent men that are living, and are with us at the present time, I think should be remembered. My mind wanders back to another noble man, our High Commissioner in London, Lord Strathcona and Mount Royal. Lord Strathcona and Mount Royal has done much for his country and Winnipeg and the Empire as a whole. It is such statesmen as Lord Strathcona and the late Sir John A. Macdonald who have made it possible for us to gather here to-night.

We have another man now at the head of affairs—I mean Sir Wilfrid Laurier. (Loud cheers.) Any words of mine would utterly fail to express what Sir Wilfrid Laurier has done for this country. I will not dwell on any of his meritorious acts, because it is not necessary to do so. (Loud cheers.) I will also refer to another noted statesman, and that is our worthy Lieutenant-Governor. (Cheers.) We were entertained in a kingly way last night at Government House. During the evening His Honor told me of some of his experiences in 1870, when he came out with Lord Wolseley, and it took three months to reach this city. When he told me of the great difficulties encountered I was gratified to know that this gentleman was now the worthy Lieutenant-Governor of this great Province of Manitoba.

We should not leave our men of Canada without referring to Premier Roblin. (Cheers.) During the last few days I read that, owing to his efforts and the efforts of the Legislature of Manitoba, the good old Union Jack, under whose folds we are all so proud to live, must now float on the flagstaff of every public school, during school hours. (Loud cheers.) I hope, Sir, that every Province of this Dominion will follow the worthy example of Premier Roblin, and that not only in Manitoba, but in every Province of the Dominion the Union flag will float over the schools, so that the love and adoration for the flag which we want the children to have will be inculcated into their minds.

I will not dwell at any length upon the pioneers that came to this country, but I would not be doing what was right if I forgot your worthy Mayor. I am very proud of Mayor Sharpe, and I am sure the citizens of Winnipeg will concur in my opinion. We are always proud of a self-made man, and I have learned that Mayor Sharpe is a self-made man. I am proud, as an Eastern man, to know that you have as your chief magistrate such a worthy occupant of the civic chair as Mayor Sharpe.

Coming back to our own associates, we are proud of the men who have been with us in the past. I am not referring to the year just closed, but to previous years—to the men who have been Presidents of this great national Association. Last year, when Mr. W. K. George was President of the Association, we all know how he filled the office with dignity and entire satisfaction to every member of the Canadian Manufacturers' Association. It was my great pleasure to act under Mr. George, as first Vice-President, and I went with him and the rest of the party to England. I was very proud, indeed, of Mr. George; and every member of our party and Canadians at home were just as proud as I was. When we thought of the difficult position he had to occupy, and the real tact and ability he displayed on every occasion, it was thought most fitting and proper to show him, as our most recent President, some slight recognition. Therefore, Mr. George, I am requested to read this illuminated address.

W. K. George, Esq., President Canadian Manufacturers' Association.

Dear Sir,—The Executive Council and Members of the Canadian Manufacturers' Association desire to formally express to you on your retirement from the Presidency their appreciation of services which you have so cheerfully and faithfully given to the Association and to the many features of its important work. The prominent part you have taken in the development of the Association since the year 1900, when you were elected as the first Chairman of the Toronto Branch, and served on the Executive Council and Parliamentary and Reception Committees, until you became its First Officer for 1904-05, has been of the greatest benefit.

During the intervening years, while serving as Ontario Vice-President and First Vice-President, the Association made great progress, and for the time and ability which you gave, both at that time and as President, the results achieved will always be to you your greatest reward. The year just passed has been an eventful one for Canada. The Dominion has truly begun to realize its great possibilities, and on all sides are evidences of prosperity and of confidence in a still greater future. On the many questions which came before the Association your influence was manifest, and your guidance conservative and safe. It would be impossible to touch on many features of the work of which you were particularly identified. It was, we are sure, of the greatest satisfaction to you to have seen the membership of the Association increase 328 during your term of office, and to have inaugurated the important and beneficial Department of Insurance.

But your great service, not only to the Association, but to Canada and the Empire, was the most successful excursion to Great Britain and France. The tact and ability with which you guided the large party of 275 Canadians, and the high ideals of Canadian advancements which you advocated on each of the many occasions when an opportunity was offered, caused not only the members of this Association, but Canada generally, to express their gratitude.

This address, then, is presented to you as a slight token of great esteem. With it, too, go the heartiest good wishes of over 1,800 manufacturers, whose hope will ever be that happiness and prosperity will accompany yourself and your family, and that you may be spared for many years to take an active part in the affairs of the Association and of your Country.

Returns the Association Thanks.

W. K. George:—I need not attempt, and I could not succeed, in trying to convey to you how much I appreciate the honor you have done me in presenting me with this beautiful address, or how highly I value the sentiments contained therein. Any work which I have been privileged to do for the Association has been repaid to me many times and in many ways, and the way in which I appreciate that repayment most has been in the splendid friendships I have made amongst our members throughout our broad Dominion. I now believe I can reckon on personal friends all the way from Victoria to Sydney, men I never knew before, and whom, through my connection with the Association, I have learned to appreciate, and I believe I can safely say they have become strong, personal friends, a friendship I value above everything else on earth.

In many other ways the work with which I have been connected has amply repaid me, and I think we can safely claim, without criticism, that the Canadian Manufacturers' Association is the strongest and most representative organization throughout the length and breadth of the great Dominion, and as one who has been closely connected with it, I might almost say, since its first inception, I can safely

say that it is broadly national in its aims; and I think you will agree with me that there is no stronger factor in the national life of the Dominion, which is drawing the far distant parts of the Dominion closer to one another than this Association.

At the same time I can assure you, and you know it, that this Association is broadly Imperial in its aspirations. This Association is bound up with the Dominion itself, and, as Canada is destined to be more magnificent than our most liberal ideas can picture, so will the Association grow. It is something that we may feel proud of, that to us it is given to accomplish so much along the line of progress.

It is not my intention to take up more of your time. We were grandly received in the Old Land last year. It exceeded all our expectations. I do not think there was one in that party who did not aim to represent Canada. I think their first aim and object was to represent the Dominion, and that spirit actuated the party from start to finish, and was responsible for the success of our visit to England.

I appreciate most highly the honor you have done me in presenting me with this address, and I will value it amongst my most precious possessions. My interest in the work of this Association, I assure you, will be as great in the future as it has been in the past, and I trust I may be spared for many years to enjoy the friendships which I have made through my connection with this Association. (Loud applause.)

The guests then joined in singing "For He's a Jolly Good Fellow."

Our Legislators.

Mr. E. L. Drewry:—Before proposing the toast of "Our Legislators" I wish to congratulate you, Sir, and the members of the Association. I never felt so proud as I did when I attended the meetings of this Convention. The spirit which has permeated the speeches at past gatherings remains with us to-day.

I am asked to propose the toast of "Our Legislators." I am asked, I think, as a matter of courtesy, because I am Chairman of the Branch, and the Committee wanted to do me some honor, and place me somewhere on the toast list. Just why I am selected to propose the toast of the legislators I do not know, unless I may plead guilty of having been a member of the Manitoba Legislature. I might relate my experience of having served under two Premiers during a short term of two years, the first under my very dear old friend, John Norquay, who I wish was present with us at this gathering—(applause)—for to know him was to know one of the largest-hearted men in the world, a man who did not know what affectation was. He was loved by all who knew him, and he was cut off in the prime of his political life. I also served under the Hon. Thomas Greenway, and Dr. Harrison, whom, I regret, was called over lately to the great majority. I think there are very few who can record the same experience, to stand first on the Government side of the House, and having the qualification or experience of passing over to the other side of the Speaker's chair. Whatever happened, I always met with the greatest courtesy from my political friends and foes, if foes I may call them. I think our legislators, whether Provincial, or Dominion, or Civic, if this toast is intended to cover our city Fathers, over whom our humorous friend, Mayor Sharpe, presides, are worthy of our strongest support. I think too much is made of the various criticisms of our public men. I think the matter is carried to too great an extreme. It is not fair, and it is not encouraging to the best men to come forward. Many of us are too busy to come forward. I remember one matter which occurred during my term of office. One speaker—I forget the exact particulars—spoke for nine hours. Of course, as the hours went by he found it necessary to moisten his lips with water about every five minutes. Finally, some member rose and said that that was the first time he had even seen a windmill run by water. (Laughter.) I am not going to place myself in that position to-night. I am not going to talk until I have to drink every five minutes and take the risk of being considered a windmill. Thanking you for coupling my name with this toast, I will now call upon my friend, the Hon. Colin H. Campbell, Attorney-General of Manitoba, to respond. Gentlemen, the toast of "Our Legislators."

The Attorney-General Replies.

The Hon. Colin Campbell:—Mr. Chairman and Gentlemen,—At the outset, I am delighted, on behalf of the Legislature, to join in the cordial greetings of welcome that have



Hon. Colin Campbell
Attorney-General of Manitoba

been extended to you, and to share the hope that many of you will yield to the irresistable charm of the West and come to dwell among us. We assure you a warm welcome and good treatment.

In responding to this toast, I feel that I can properly qualify for membership in your organization, because I represent a body of men who are manufacturers, who meet annually to make laws—beneficent, of course. They absolutely insist that nothing along their lines, unless it be "Made in Canada," shall be in force in Canada; and you will recognize that much depends upon our efforts and the class of legislation we adopt. You will also agree with me that it is necessary that we should adopt such legislation as will be helpful and beneficial to the varied interests in our midst.

Manitoba's Peculiar Problems.

Each Legislature has its own peculiar needs and conditions to cope with. After passing Lake Superior and

coming to the Great West, one instinctively feels that there are new and different problems to be solved—problems of transportation, nationalization, and education. When we consider that about one-third, or 40 per cent., of the people west of Lake Superior are foreign born, that they come from countries envious and often antagonistic to the homeland, the difficulty of the problem becomes apparent. Our endeavor, in which I believe we will succeed, is to weld them into one harmonious whole. They may not at first love the Motherland, yet by loving her daughter, they, or at least their children, will come to respect, honor, love and obey with zeal and fervour, not less than native-born Canadians, the flag that is symbolic of the largest liberty and highest humanitarianism the world has ever seen.

And you will also perceive that we have a great optimism to deal with; and we have also a small spirit of narrowness and prejudice to meet; and there are some also who would selfishly close their eyes and narrowly look only at Manitoba interests. And while we in the Manitoba Legislature are strongly Manitoban, and will always remain so, yet I desire to say, and say it emphatically, that not only in Manitoba, but throughout the whole West, we are not so selfish as not to recognize that we are in a wider sense Canadians, owing obligations to the national life of Canada, and also, as a part of that national life, to the life of the Empire as a whole.

In legislating we have advantages and also disadvantages. We have the traditions of the past, the experience of our sister Provinces in confederation, and of the great Mother of Parliaments, to guide us in the right principles upon which to base legislation. And whilst we have possessed and do possess a freedom of action that is exceedingly desirable and absolutely necessary to enable us to deal with the new and different conditions; yet we have been so steadied in the exercise of that freedom by the history and experience of the past, that our legislation has possessed a conservatism, a freedom, and an originality of purpose and action, that have enabled us to steadily pursue the path of progress and to clear our visions and enlarge our horizon so as to make us broad-minded Canadians. I believe on the whole we have responded to the obligations resting upon us, whether these obligations were along the lines of the Province or the wider field of Canada.

Praise for Laws.

I think I can say, without egotism, that our municipal, our commercial, and our industrial laws are models of simplicity and directness, safely guarding every interest, yet leaving abundant room for the freedom and individuality necessary for the full and proper development of our people and their interests. And I may further say that I believe our Legislature has been inspired in their policy and legislation, with the best national sentiment, and will be prepared at all times to join with our sister Provinces or the Federal Government in advancing the highest national aims.

We have also endeavored to be practical and progressive in our legislation. It was a matter of great pleasure and pride to us when, a few years ago, there was a call by the commercial interests of Canada, that the Dominion Parliament should enact a joint stock companies Act that would be simple, effective, and protective in its operation, that Parliament should copy our Joint Stock Companies Act verbatim.

Manitoba Led the Way.

I might mention other respects in which we have led the way, but I do not propose to take up your time now, except to say that you will find the Manitoba Legislature always ready and willing to adopt such measures as will absolutely and fairly protect every interest within her borders, insisting upon the recognition of those principles that will guard life, property and the maintenance of British law and order, in the same way as the British Parliament itself would do.

There is one suggestion that I would offer to your Legislative Committee, that is that you would endeavor to bring about uniformity of legislation along the lines of commercial interests in the various Provinces; that whilst each Province has provincial rights, which cannot be interfered with, it must retard and be injurious and hurtful to every interest that any man in any one of the Provinces should find himself confronted with different commercial laws in the several Provinces. I believe it would be advantageous if some plan could be devised whereby commercial legislation should be along practically similar lines throughout the country, except where departure would be necessary owing to local conditions.

In conclusion, on behalf of the Legislature, I would thank you for the cordiality shown in the reception of this toast, and I would ask you to consider the needs of this great Western country, and if possible come to dwell among us and carry on your manufactures. We are chiefly an agricultural country, but happily there is no antagonism, or ought to be no antagonism, between the agricultural, commercial, manufacturing, or industrial interests of this Province, or of Canada as a whole. The demagogue may seek to poison and to prejudice the minds of some; the selfish man may seek sordid advantages; but the sane judgment of the people of the whole of Canada will say that all our interests are really identical, and we will join hands to build up unitedly every interest, and thereby to make Canada more and more the glorious land which it is undoubtedly destined to be.

And if some sacrifices are needed, these, I feel confident, will be readily made, if the enrichment, the advancement, and the progress of our beloved Canada are thereby increased. I believe the Canadian manufacturers will loyally and patriotically respond to any obligation resting upon them.

I trust that it may not be long till we see you again, and enjoy your good company. We wish you every prosperity in the prosecution of your manufacturing interests. (Loud applause.)

Canada and the Empire.

Mr. R. J. Younge proposed the toast of "Canada and the Empire." He said: I thank you very much for the hearty manner in which you have received the announcement of this toast, and I only regret that in proposing it I am handicapped with a severe cold. But I am safe to say that, for a young Canadian, the toast brings its own inspiration, and I wish to say a few words with regard to Canadian national sentiment. Canada was born in 1867, but it was not until thirty years after that she discovered for herself her own true greatness. It is only in the new days of the twentieth century that the truth of those words so beautifully written, which appear on our menu card of to-night, has become apparent:—

"From Nova Scotia's misty coast to far Columbia's shore,
She wakes—a band of scattered homes and colonies no more:
But a young nation, with her life full beating in her breast,
A noble future in her eyes, the Britain of the West."

What is the result? We find a new element to-day in Canada's national life. It is that faith in ourselves and in

our own great resources which will finally place us in the front rank of the nations of the world.

A few years ago the love of our country was centred in those sea-girt isles which so many of our fathers call "home." We gloried in the traditions of the past and in the reign of such a splendid sovereign as Good Queen Victoria; we gloried in those British cities whose thousands of workmen are at this very moment going to work in "the workshop of the world"; we gloried in the stately palaces of Britain; we gloried in that democracy which has clung through centuries to the principles of responsible government; we gloried in those associations which have forever linked themselves in history with the traditions of a great people and the march of civilization. These are all ours to-day, but with them we have joined a new note. We have found ourselves; and we have added our voice to the voice of Empire. I say, Mr. Chairman, without hesitation, that the Canadian West is responsible for this new sentiment in Canada. (Cheers.) You all remember that a few years ago we were on our knees at Washington. We were more than anxious to negotiate a reciprocal treaty with the United States. We were afraid of our greater neighbor to the south, but to-day that cringing, pleading sentiment is dead. You, the people of this great Western country, filled with faith in the future which awaits you, have revealed that future to the world. You, with your enthusiasm, have penetrated every part of this great Dominion, and have kindled those fires of patriotism which are to-day the foundation-stone of our national sentiment.

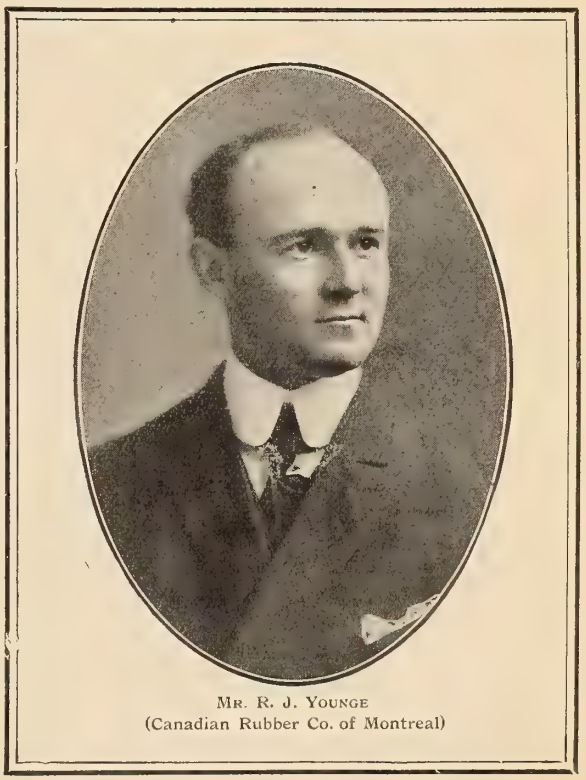
If there is one regrettable feature in the history of our country, it is not that our brave forefathers fell in 1812 or 1866, or that we have been denied our rights in national boundary disputes; the greatest regret we have in the history of this country is that the United States has claimed more than one and a half millions of the best brains and blood of this country. Those young men have left our cities to accept industrial opportunities in the United States, which we, with our slow and imperfect development, could not offer them. It is a tribute to the Canadian West and to the whole of Canada that they are coming back to us. As Cy Warman, one of our own Canadians, who himself sought the shores of the United States to satisfy his high ambitions, has written:—

"There's a bustle on the border; there's a shuffling of feet,
Where the shores of the Republic and the big Dominion meet;
For the sons of the Dominion, who have wandered far away,
Are coming back to Canada to-day. (Cheers.)
Now, the sleeping Empire's waking and their loyal hearts are thrilled,
For they're hearing from the home folk who have tarried here and tilled.
Straight they march and never falter, never loiter at the line,
Though they leave the friendly palm tree for the pine.

They're coming back to Canada, new Empire of the West,
To the boundless fields and forests of the land they love the best;
Aye, 'tis feet across the border now, and toes the other way,
For they're coming back to Canada to-day.
Yes, they're coming back to Canada; there may be nothing wrong
With the land of their adoption, but they've been away so long:
And some of them have soldiered there, and some of them are gray,
But they are coming back to Canada to stay."

(Hear, hear, and cheers.)

But if the Canadian West is responsible for the birth of this new sentiment, I think the Canadian Manufacturers' Association are deserving of the greatest credit for the impetus which the new movement has received from their great organization. They are the one great national Association which has taken up this new sentiment, and which has popularized it with the Canadian people. When Canadians were asking for "imported" goods, when the words, "Made in Canada," met with a sneer from the Canadian public, the Canadian Manufacturers' Association took up that simple phrase and made it mean something to the



MR. R. J. YOUNGE
(Canadian Rubber Co. of Montreal)

Canadian people. Nor have your efforts been confined to Canada. The work of this great Association has echoed across Great Britain with a voice both national and Imperial.

With "Canada" in this toast we have associated "The Empire." What a field for thought, both for the past and the future! But I simply wish to say that, so far as Canada's part in the Empire is concerned, Great Britain and her statesmen, if we understand them correctly, are united with us on this fact, that Canada is serving the Empire most truly in developing her own great resources, and building up a solid and prosperous British Dominion on this North American Continent. We want the most cordial co-operation with Great Britain and all other British Dominions. The bonds which bind us together are stronger than "the sordid bonds of trade," but we wish the aid of Britain in developing our great heritage.

Let us, above everything else, cultivate this hearty, honest, Canadian sentiment. It has been well expressed by our own Canadian poet, Dr. Drummond, a brother of a Past President of this Association:—

"Our fathers came to win us
This land beyond recall,
And the same blood flows within us
Of Briton, Celt, and Gaul;
Keep alive each glowing ember
Of our sireland, but remember
That we are Canadians
Whatever may befall.
Who can blame them, who can blame us,
If we tell ourselves with pride
How a thousand years to tame us
The foe has often tried?
And should e'er the Empire need us,
She'll require no chain to lead us,
For we are Empire's children,
But Canadian over all."

In conclusion, I give you the toast, "Canada and the Empire," soon to be joined, we hope, by the strong material bonds of Preferential Trade, but whether that shall be or no, joined always with the bonds of warmest affection between ourselves and the Homeland. "Canada and the Empire."

The President:—We have with us to-night Mr. Craig, M.P,. of the British House of Commons, and I will call upon him to say a few words.

Member of British House Speaks.

Mr. Craig expressed his pleasure at being called upon to speak on this toast. He was himself an Imperialist. His work in the House of Commons was ever aimed at strengthening the bonds which bound the various parts of the Empire together. "As I listened to the speeches before me," he continued, "a great desire burned in my mind, that one of our statesmen, whose name I know is revered by a great majority of Canadians and others of the British Empire, should have been with us to-night. It has always seemed to me to be the A, B, C of Imperial politics, that it is a good thing for the Empire to be drawn closer together. It has always appeared extraordinary to me that there should be such an amount of diversity of opinion in the Old Country. But we are all actuated by the same motives, and our differences are only our means for arriving at the given end."

Mr. Craig spoke appreciatively of the hospitality which he had met with in Canada. Winnipeg and the West were revelations of industry and development. The advances made during the past five years might well fill the people with pride. Even in the few days he had been there streets seemed to have sprung up around him. "In conclusion," he said, "I hope that when I go back to England I may be able to induce many of my colleagues to come and visit Canada. I believe there is much for each of us to learn from the other."

The Industries of Canada.

Mr. Lloyd Harris:—In proposing the toast, "The Industries of Canada," I wish to say at the outset that it is not necessary to confine our industries exclusively to manufacturing. This broaches a subject which requires considerable imaginative powers to grapple with, owing to its vastness. My imagination is not sufficient for such a task. On the proper development of our industries depends the making or marring of this country. We are fortunate in having our lots cast in this country. We are fortunate in our Mother Country, whose precepts have ever been of justice and righteousness in the administration of our laws; and in our natural resources, which, wisely developed, will mean unheard-of wealth; and in the fact that the pioneers of our country have shown such an example of sturdy independence, which must make of us a great nation.

Gentlemen, our chief industry is that of agriculture—(Hear, hear)—I am not going to make a speech on agriculture, and tell you what has been accomplished in this, because that properly falls to the gentleman who responds to this toast; but we from other points of Canada, we from the East, are proud and rejoice that our friends in the West have such magnificent results to show in the development of agricultural industries. (Hear, hear.) We sincerely hope that this development will continue, and not only will Canada be noted for producing the finest wheat in the world, but that she will be in a few years the greatest producer of the finest wheat. (Applause.)

It has been said that the fish supply of Canada is more valuable than that controlled in any other part of the world. This being so, I think it is important to develop our fisheries. The Government must take measures to ensure our success in that line. If we can make a successful industry of the sea fisheries our profits will be their profits, and their profits our profits.

Our mining industry is developing, and I can only say that I hope the control of the same will remain in Canadian hands, and that the money thus made will be kept here. In connection with our lumbering, I hope that those going to the coast will meet our British Columbian friends and learn something about the enormous industry there. There is no need to speak about the manufacturing industries except to say that the Canadian Manufacturers' Association are anxious to see this development to the fullest possible extent in Manitoba and the other Provinces in the West.

I have talked with a great many Winnipeg men as to the possibiliies of this great city. They claim in ten years they will have a greater population than Toronto has at the present time. I sincerely hope they will. The question arises, how are you going to support such a population in such a large city? Can they all gain a livelihood dealing in real estate? (Laughter.) Perhaps you may all develop into politicians. This may be a business you can follow. However, I think the future of Winnipeg and its proper development must be along the line of gaining manufacturing industries. (Hear, hear.) We, in our part of the country, will be glad to see you grow; we manufacturers in Brantford feel we have too many manufactures now, as we cannot get enough labor for those we have. We will be glad to recommend Winnipeg as a good and proper site to those who are thinking of leaving us.

Now, I have had a hint that I must cut my remarks very short, and I will just ask you to fill your glasses to the brim and drink to the toast, "The Industries of Canada," and I will ask the Hon. R. P. Roblin, Premier of Manitoba, to respond.

Premier Roblin:—Mr. Chairman, I thank you for the exceedingly cordial manner in which you have received the toast with which my name is coupled. I cannot say that I am surprised at the warmth of the reception, as such a toast necessarily finds a responsive chord at a function of this kind. After the many interesting, instructive and eloquent addresses that you have already heard, the only thing I regret is that someone more capable than myself had not been selected to respond to the toast, "The Industries of Canada." Were it not that the hour is so late, that my time is limited, and that so many eloquent speakers are to follow me, I would like to have made a reference to some of the things said by previous speakers. But for these reasons I shall not only forego that pleasure, but shall also omit the usual

preliminary remarks a speaker is presumed to make. I cannot, however, pass on without expressing my pleasure and appreciation at being permitted to join you in your annual banquet, and to have a place on your toast list.

The toast, "The Industries of Canada," is a very important one, and opens up a very wide and fruitful field for discussion—so much so, that I cannot hope to cover it either to my own satisfaction or your advantage. Our country, as compared to the nations of the earth, is young—a mere child. Less than forty years have passed since the Fathers of Confederation launched the good ship, "The Dominion," on the seas of national life, and the citizens of Canada assumed the responsibilities that were engendered by the new creation; but in that time marvellous results have been accomplished by virtue of the energy, the enterprise, and patriotism, of sturdy Canadians. In commerce, in finance, in agriculture, and especially in industrial progress, we have made wonderful progress. The total trade of Canada in her first year was less than $100,000,000. This year it is estimated at $600,000,000. The capital invested in industrial enterprises in 1871 was $75,000,000, and in 1906 was $550,000,000, with nearly half a million of employees and a pay-roll of over $100,000,000 annually. These figures show what we have done, and that, too, under disadvantages of a very pronounced character, that marked our earlier life.

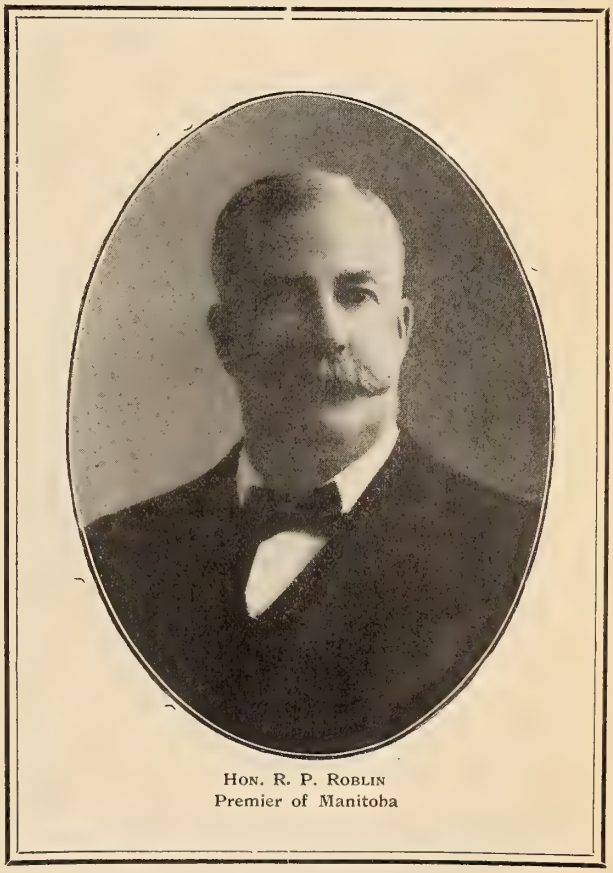
We are naturally led to enquire the source of this great growth and expansion. There is only one answer: the development of the natural resources of the country along agricultural and industrial lines. Canada, in forest, field, mines and fisheries, is rich beyond the dream of avarice or the wealth of the Orient. Nature has scattered with a lavish hand over all our land all that is requisite for national greatness, wealth and influence. Therefore, this mighty heritage is to be used and developed by the citizens of Canada for the profit and advantage of the Dominion, and the glory of the mighty Empire to which we are so proud to belong.

Canada's fields of agricultural possibilities, to use the words of one of England's greatest men, standing on the banks of the Red River, are simply illimitable; our mountains and streams are studded with minerals, the most desirable and valuable; our forests are simply boundless and unknown, so far as their wealth is concerned; while our fisheries teem with the choicest of the finny tribe. It is not only desirable, but necessary for the expansion of industries that we use these great natural resources for the benefit of Canadians first, and then to trade with the people of the world. I make bold to say that just in proportion to our industrial enterprise so will our advancement be. The measure of progress, the rapidity with which this shall be accomplished, the manifest destiny of the country, can fairly if not absolutely be stated to be the measure of its industrial enterprise.

Firm Trade Policy Wanted.

What is the first essential in order to secure this national growth and development? The first essential is a firm and stable trade policy, one that can be truthfully called a national policy—(Hear, hear)—one against which the shafts of the interested and selfish cannot fall. Such a policy I believe is what is wanted in Canada—a policy that will give stability and firmness to our industrial enterprises. A public man who would advocate a policy that would impair the stability of Canadian industrial organization, or advocate a policy that would handicap or embarrass it, has lost the qualities and germs out of which statesmen are made.

A people or nation without industrial enterprise is form without substance—a body without soul. This is specially applicable to a country such as Canada, where nature has spread so bountifully rare and rich gifts which should be moulded to meet the necessities and requirements of the people. Canadians have reason to congratulate themselves upon the success they have achieved in the past. This magnificent banquet is eloquent testimony to that fact. I am glad to know that a very great proportion of the goods upon the market can be properly labelled, "Made in Canada," but still there is a very considerable quantity which can be labelled, "Made in Germany," and other foreign countries. For instance, the trade and navigation returns for 1904 and 1905 showed imports from the Republic to the south of $140,000,000, on which duty was paid. I am of the opinion, whether rightly or wrongly, that if the goods that were imported, and which could have been made in this country were made here, Canada would be correspondingly richer and better. (Applause.)



Hon. R. P. Roblin
Premier of Manitoba

Deplored Imports of Machinery.

I am told by those in authority that over $3,000,000 worth of what could properly be classified as agricultural implements, including machinery and vehicles, were imported into Western Canada during the past year. I cannot understand a man who would undertake to justify or support a condition of that kind, and declare it to be in the interests of the people, unless it can be shown that that class of goods cannot be made in Canada at the same price and of equal quality. I would like to see the man who would tell him that with all our natural resources we cannot make these goods in Canada as well as in a foreign country. If I were told so, I would answer that from the New England States to the Golden Gate of California there is not a factory in which Canadian brains, muscle, and skill are not employed. (Applause) Therefore, my policy and wish is that a condition of things should exist whereby the manufacturing industries of Canada would be so stimulated that present disadvantages might be remedied, so that what

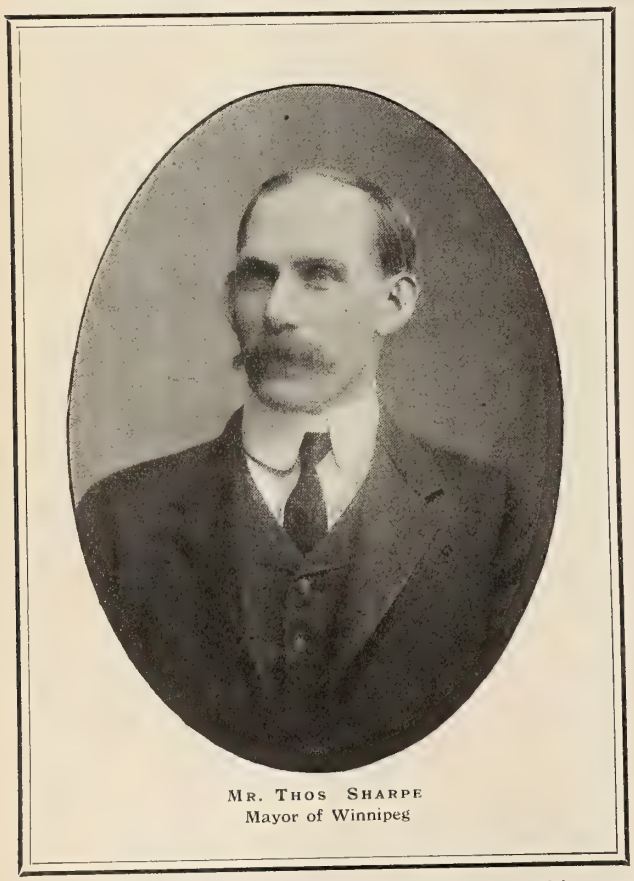
might be as successfully made in Canada as anywhere else, be made at home, and the money kept in Canada. (Applause) To buy from the South is simply helping to keep up the cities in the Republic, and the money for this comes from the agricultural classes.

That we have done much along industrial lines, this magnificent meeting to-night is eloquent testimony. That there is much to do in the future, we all realize. How best to protect and enlarge the old premises and build new ones is food for serious thought for all.

The President:—We have listened to a magnificent speech, and we are proud to know you have such a Premier for Manitoba as Mr Roblin. We have one more toast on our list, and I will ask Mr. W. K. McNaught, M.P.P. for Toronto, to propose it.

Winnipeg and the Western Provinces.

Mr. McNaught:—The toast I am asked to propose is



MR. THOS SHARPE
Mayor of Winnipeg

"Winnipeg and the Western Provinces." It is a big toast, and I sincerely wish it had fallen on some one better able than myself to do it justice. Whatever is my shortcoming, however, I yield to no one in my admiration of your city, or your ability as a people. Mr. Chairman, the importance and possibilities of your city gives to me a new idea. It was in my mind as far back as 1876, when thirty years ago I paid my first and only visit to Winnipeg before I came here at the beginning of this week. True, it was only a village of some few thousand people at that time, and as crude as new villages usually are. But as I looked on the fertile prairie land, and saw there were millions of acres towards the setting sun, and as I thought of the splendid possibilities for the raising of grain and other products, I knew in my heart that in this wonderful Western country, which God had given to us for our heritage, we held the future granary of the world. (Hear, hear.)

I see no difficulty in Winnipeg becoming the future Chicago of Canada. To-day, as I looked over your splendid city, and saw the evidence of your unprecedented growth and prosperity, I did not wonder at your splendid pride, as you are citizens of no mean city. Time will not permit me to contrast Winnipeg of 1876 with Winnipeg of to-day, but I may be permitted to point out that it took me twelve long, tiresome days to travel from Toronto here when I first came, and this week I came in forty-eight hours. In 1876, the flour used here had to be imported from St. Paul or Minneapolis, and it used to be said that the steamers employed in that work used to pay for their cost on each trip out of the charges for freight carried. There is nothing of which I am so proud as the fact that I personally recorded the first shipment of wheat ever made from the North-West. In 1876 I came across 500 bushels of wheat in the warehouses of Messrs. Higgins, Young & Peeble. I had no difficulty in making my mind up, and, so far as color and quality of that red wheat went, I knew it was better than I had seen in Ontario. On returning to Ontario I succeeded in buying the wheat for seed. Although 1876 was a day of small things, it has not always remained so. That export of 500 bushels of Red Fyfe wheat has gone to nearly 100,000,000 of No. 1 Hard. But, though wheat is the ruler of the West, it may not be always so. I venture to prophesy the history of the Western States will be followed by mixed farming, and that with stock raising farmers in the West you will find increased profit. I venture to predict that cheap power will affect the food supply. It will be only a question of time before the West will manufacture the goods it consumes.

Mr. McNaught closed by reading Mr. J. W. Bengough's poem, entitled "At Winnipeg Station."

Mayor Sharpe responded to the toast. He said:—I thank you very heartily for the manner in which you have received this toast I am sure it is very pleasurable for me to be here to-night to say a few words to you, who have so much to do with the development of the great Canadian West, and the Dominion generally. Time will not permit me to handle, other than superficially, the subject set before me. I have been accused of holding up the City of Winnipeg, holding up almost everything, and I would not like to be accused of holding up the train carrying the gentlemen of the Association to the coast. The City of Winnipeg is very glad to welcome you at the present time.

I feel that this toast of "Winnipeg and the Western Provinces" is such that it would take a very great deal of time to do it justice. As you know, the City of Winnipeg is prosperous, and it is largely due to the great prairies immediately to the West of us, and between us and the Rocky Mountains. You will find some nine hundred miles to the foot of the Rocky Mountains all of the finest land that can be found in any part of the globe. To the North-west you will probably travel 2,500 miles, and still be in good territory. One of the things that has made Winnipeg great is the prosperity of the country to the West of us, and that prosperity seems to be maintained. During the year 1906, a total of 189,064 settlers, made up of 57,796 Americans, 86,796 British, and 44,472 foreigners, came to this Western land. You see, the party who gave me these figures did not class our friends to the South as foreigners. We are very pleased to have them, as brothers, with us. I am very pleased to say to Mr. Craig, I can excuse his calling Winnipeg a city. Two things we have not got here, that is, beautiful cathedrals as in Ireland and Irish landlords. (Laughter.)

I will give you a brief synopsis of the city's growth during the past five years: In 1901 the assessments were $26,405,770, and in 1906 they increased to $81,000,000. Building permits were, in 1901, $1,707,557, and in 1906 were over $11,000,000. We have made an effort to lift the city out of the mud on to the pavement. What I want to impress

on you is what we intend to do in the future. At Winnipeg, as a port of entry, last year we collected $3,053,095.97. My only regret is that the greater portion of this had been paid to other than our own artisans. We are going to endeavor to do something to get manufacturers to locate in this city. Our city has voted a large sum for the development of cheap power for the use of manufacturers, and I believe that, when this is consummated, we will be able to furnish power as cheaply as any other city in the Dominion of Canada. I can assure you prices will be just as low.

The possibilities of market development in this great and growing country are unlimited. We expect in twenty-five years to have, west of Lake Superior, a population of over forty millions, as Jim Hill has predicted; and this will afford a fruitful opportunity to manufacturers who locate here. But we intend to do more than give you cheap power. We also intend—and I am speaking officially now, since the last meeting of the council, at which action was taken—we also intend to offer a fixed rate of taxation for a term of fifteen years. We believe that, when a manufacturer comes to the city of Winnipeg and erects his plant, he should be given the benefit of his expenditures and development. And another thing, newspaper accounts to the contrary, we will be in a position in the very near future to furnish water about as cheaply as any other city; and I can assure you that we will be prepared at all times to extend the glad hand to manufacturers to come to the City of Winnipeg, more particularly Canadian manufacturers. We will endeavor to give you all facilities.

I thank you for the privilege of being here to-night. I sincerely hope you have enjoyed yourselves, and I wish you a pleasant and joyous journey to the other end of our great country

Mr. Cockshutt:—On behalf of the Manufacturers' Association I thank you for the generous and hospitable welcome you have accorded us in Winnipeg; also the Council and all others who have entertained us. We have enjoyed our stay; we have profited by it, and in saying good-bye we trust to have the pleasure of again visiting you at an early date.

The President then called for three cheers for Winnipeg, which were given with enthusiasm, after which the banquet was brought to a close by singing "God Save the King."

MESSAGES RECEIVED DURING CONVENTION

Letter of Regret.

Montreal, Sept. 12, 1906.

Mr. C. C. Ballantyne, President Canadian Manufacturers' Association.

My Dear Mr. Ballantyne,—I am unable to be present at the Annual Meeting. I trust that neither yourself nor the other members of the Association will think that my absence is owing to lack of interest in the Association, for I can assure you that it increases as the years go by.

To me it is not only a matter of regret, but I deeply feel the deprivation of the pleasure I miss. Although on several occasions I have visited the great City of Winnipeg, which we all contemplate with pride, I have hoped to again view the evidences of its wonderful prosperity, and beyond see for myself something of our great North-West. Congratulating you on the able manner in which you have conducted the work of your office during the past year, and trusting we shall be favored with a successor worthy to fill your place, I am,

Yours truly,

GEO. BOOTH.

Greetings from Lord Strathcona.

President Canadian Manufacturers' Association. (Special Train West, Calgary.)

Please accept for yourself, and convey to the members of the Canadian Manufacturers' Association, my abiding gratitude for your most kind greetings by which I am profoundly touched. No better evidence of real progress of Canada or earnest of its great future could be found than the meeting of your important Association this season in Winnipeg, only thirty years ago a village of a few hundred and now a progressing city of upwards of 100,000. Again I tender my heartfelt thanks.

(Signed), STRATHCONA.

Sir Vincent Howard's Telegram.

Toronto, Ont., Sept. 18, 1906.

President Canadian Manufacturers, Winnipeg, Man.

Greetings to Canadian Manufacturers' Association. Gratitude for your speech on British Preference. Regret will not see you at Toronto.

(Signed), SIR HOWARD VINCENT,
National Club.

Invitations for Next Convention.

Vancouver, Sept. 18, 1906.

C. C. Ballantyne, Esq., President Canadian Manufacturers' Association, Winnipeg, Man.

Regret exceedingly not being able to attend meeting. Trust you will name Vancouver as next Convention point.

JOHN HENDRY.

Toronto, Sept. 19, 1906.

H. Cockshutt, President Canadian Manufacturers' Association, Winnipeg, Man.

On behalf of Provincial Government I cordially invite Canadian Manufacturers' Association to hold their Annual Convention next year in the City of Toronto.

PREMIER WHITNEY.

Toronto, Sept. 19, 1906.

H. Cockshutt, President Canadian Manufacturers' Association, Winnipeg, Man.

Toronto would welcome next Annual Meeting of Association.

J. G. MERRICK,
Secretary Employers' Association.

Toronto, Sept. 19, 1906.

H. Cockshutt, President Canadian Manufacturers' Association, Winnipeg, Man.

Toronto extends to your Association a most cordial invitation to hold its next Annual Meeting here.

MAYOR E. COATESWORTH.

H. Cockshutt, President Canadian Manufacturers' Association, Winnipeg, Man.

Toronto, Sept. 19, 1906.

The Retail Merchants' Association sends congratulations and invites your Association to hold next Convention in Toronto.

E. M. TROWERN,
Secretary.

Officers and Committees
of the
Canadian Manufacturers Association, 1906-7.

PRESIDENT:

H. Cockshutt, Cockshutt Plow Co., Ltd., Brantford.

FIRST VICE-PRESIDENT:

Hon. J. D. Rolland, The Rolland Paper Co., Montreal.

PROVINCIAL VICE-PRESIDENTS:

ONTARIO:

Lloyd Harris, Brantford.

QUEBEC:

G. A. Vandry, J. Arthur Paquet, Quebec.

NOVA SCOTIA:

T. M. Cutler, Acadia Sugar Refining Co., Ltd., Halifax.

BRITISH COLUMBIA:

Jno. Hendry, B. C. Mills, Timber & Trading Co., Vancouver.

MANITOBA:

L. C. McIntyre, Paulin Chambers Co., Ltd., Winnipeg.

NEW BRUNSWICK:

Chas. McDonald, St. John Iron Works, Ltd., St. John.

PRINCE EDWARD ISLAND:

F. L. Haszard, Charlottetown Condensed Milk Co., Ltd., Charlottetown.

ALBERTA:

A. E. Cross, Calgary Brewing & Malting Co., Ltd., Calgary.

SASKATCHEWAN:

E. J. Brooks, Western Mfg. Co., Ltd., Regina.

TREASURER:

Geo. Booth, The Booth Copper Co., of Toronto, Ltd.

GENERAL SECRETARY:

J. F. M. Stewart, B. A., Toronto.

EXECUTIVE COUNCIL.

ONTARIO:

Geo. J. Armstrong, McKinnon Dash and Metal Works Co., Ltd., St. Catharines.
C. Bermingham, Canadian Locomotive Co., Ltd., Kingston.
H. Bertram, John Bertram & Sons Co., Ltd., Dundas.
W. C. Breckenridge, Norton Mfg. Co., Hamilton.
L. J. Breithaupt, Breithaupt Leather Co., Ltd., Berlin.
J. A. Coulter, John Morrow Machine Screw Co., Ltd., Ingersoll.
Hon. E. J. Davis, Davis Leather Co., Newmarket.
W. W. Doran, Niagara Neckwear Co., Ltd., Niagara Falls.
J. D. Flavelle, Flavelle Milling Co., Ltd., Lindsay.
H. W. Fleury, J. Fleury's Sons, Aurora.
Geo. D. Forbes, The R. Forbes Co., Ltd., Hespeler.
Lt. Col. W. M. Gartshore, The McClary Mfg. Co., London.
J. M. Gill, Jas Smart Mfg Co, Ltd, Brockville
Jas Goldie, Jas. Goldie Co., Ltd., Guelph.
Geo. Heintzman, Heintzman & Co., Ltd., Toronto.
E. G. Henderson, Canadian Salt Co., Ltd., Windsor.
J. Hewton, Kingston Hosiery Co., Kingston.
R. Hobson, Hamilton Steel & Iron Co., Ltd., Hamilton.
J. I. A. Hunt, Hunt Bros., London.
J. S. Knetchel, Knetchel Furniture Co., Ltd., Hanover.
G. C. H. Lang, The Lang Tanning Co., Ltd., Berlin.
R. O. McCulloch, The Goldie & McCulloch Co., Ltd. Galt.
R. McLaughlin, The McLaughlin Carriage Co., Ltd., Oshawa.
T. F. Matthews, Geo. Matthews Co., Ltd., Peterboro.
Jas. Maxwell, David Maxwell & Sons, St. Mary's.
Col. J. I. Moody, Eagle Knitting Co., Ltd., Hamilton.
D. Murphy, Rideau Mfg. Co., Ottawa.
P. J. Myler, Canadian Westinghouse Co., Ltd., Hamilton.
Jas. Playfair, Playfair & White, Midland.
J. A. Publow, International Harvester Co., of Canada, Ltd., Hamilton.
J. Ransford, Dominion Salt Agency, London.
E. W. Rathbun, The Rathbun Co., Deseronto.
Carl Riordon, The Riordon Paper Mills, Ltd., Merritton.
Wm. Robins, Hiram Walker & Sons, Ltd., Walkerville.
T. A. Russell, Canada Cycle & Motor Co., Ltd., Toronto Junction.
A. Saunders, Goderich Organ Co., Ltd., Goderich.
T. H. Smallman, Canada Chemical Mfg. Co., Ltd., London.
H. B. Smith, The North American Bent Chair Co., Ltd., Owen Sound.
T. J. Storey, The Canada Carriage Co. Brockville.
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STATISTICS AND NATIONAL PROGRESS.

THIS phrase is often enough on our tongue. But to be assured of its reality is another matter. Statistics, even in the most advanced countries, are admittedly insufficient to bear the strain of any general enquiry; and in young countries like Canada they are still more halting. Of course, opinions of trained and experienced observers may be given where exact knowledge fails. But even then the constant misuse of imperfect statistical data and the turmoil of political argument often bewilder the ordinary citizen, while at times Government reports, themselves, are not without a dash of political color, until in attempting to reach an unbiased conclusion one scarcely knows where to begin or end.

A welcome change in all statistical work would, of course, be to accompany the condensed tables with expert and adequate criticism, analysis, or discussion, of the lessons to be drawn. Fortunately for the tendency in this direction, a great deal has already been done to break down the tradition that official statistics should be printed and scattered broadcast as so much raw material. As such they are frequently, if not strictly speaking, almost always unintelligible to even the instructed public.

A little two shilling book driving home these truths has just appeared, entitled "National Progress in Wealth and Trade," by A. L. Bowley (P. S. King & Son, London). It is the best book of its kind that has appeared for many a day. Professor Bowley sets out to tell us just what conclusions British statistical data legitimately allow one to form. Evidently his enquiries have been thorough and conscientious, and every student of industrial England and Imperialism should read it carefully. It can be recommended without reserve. The learned author declines to shape general conclusions, but one or two from topic to topic may be mentioned here. Among the observations he states: (a) We are completely in the dark as regards some of the most essential data for estimating the income of the nation. (b) It may be reasonably admitted that the value of £1 in the hands of a workingman has at any rate not fallen in the last twenty years; on the whole, the evidence is in favor of a rise of nearly ten per cent; that is, there is more money and money's worth at the disposal of the people. (c) England was using in manufacture in 1902 15 per cent. more cotton than five years previously, 40 per cent. more wool, 18 per cent. more iron, 60 per cent. more lead, 80 per cent. more zinc; 85 per cent. more leather, 60 per cent. more imported wood and timber, 28 per cent. more coal, the same amount of tin, but 25 per cent. less silk. Meanwhile the population has grown 14 per cent. (d) It is quite impossible to make any general statement that English exports tend to be the product of low-paid and unskilled labor, or the reverse. Exports have increased at about the same rate as the population. (e) There are no means of measuring the stress of competition. We have to balance the gain of the consumer, including the gain to the manufacturer, against the loss to those producers who have to turn from one occupation to another. The growth of new employments where competition is less keen or where fashion is stronger is shown by the statistics of occupation and of consumption. (f) It seems futile to judge of British manufacturing success by the amount of exports and imports. (g) Equal effort in Great Britain is being repaid by more and more foreign products. (h) The total output of British manufactures has increased greatly in recent years; the part exported to foreign nations has increased a little, that sent to the colonies considerably, but that retained for home consumption most. (i) We have practically no information in an accessible form as to the industrial progress of any foreign nations except Germany, Belgium, France and the United States. (j) The progress of one country does not necessarily mean the decay of another.

These and other particular conclusions, equally instructive and suggestive, invite one to a perusal of the volume. The one omission is a discussion of the possibility of periodically sustained foreign competition killing by violent means industries that on all counts should thrive, but on this point statistics necessarily fall short. S. M. W.

Grain and Stock Gambling.

Messrs. King & Son have just issued a book on *International Commercial and Financial Gambling In "Options and Futures"* by Mr. C. W. Smith, who has written many volumes of related topics. The author points out the widespread ruin that follows in the wake of speculative rises and falls in prices. Corners and partial corners in wheat, cotton, pig iron, copper, silver, etc., are cited and governments are called on to restrict as far as possible, fictitious buying and selling.

If the market in any commodity can be cornered there is no doubt room for argument for all possible legislative restrictions. To date, however, there are many more financial wrecks than millionaires from attempts at monopoly. Indeed, it is quite open to question whether on the whole the inherent difficulties and dangers in such operations are not quite as efficient deterrents as any proposed legislative penalties. Legitimate speculation is the free play of opinions as to values. Where speculation lies in wait for financially weak buyers and sellers, and forces prices up or down temporarily through sheer manipulation, or springs a surprise on a tight money market with disastrous results to some investors, it is a bandit, and should be brought down if possible. The pity is that it so often masquerades in the garb of ordinary straightforward business, that in bringing it down we are apt to lay many an innocent neighbor low as well. In other words until speculation can be specifically dealt with, legislative changes can hardly be recommended. It remains for Mr. Smith and kindred would-be-reformers to bring forward specific suggestions.

In the meantime quotations on the stock and produce exchanges are the world's barometer of values. If the exchanges were closed the world would be in outer darkness as to demand and supply, and a substitute would have to be found right speedily. No one will deny, however, that stock gambling is a great and growing evil. S. M. W.

Citizenship and the Schools.

In an instructive volume bearing this title, just issued by Henry Holt & Co., written by Professor Jenks, of Cornell University, the very important problem is discussed of how our schools can best raise the standard of citizenship. Our school teachers have a big task before them, and Canada looks to them to solve it. There is much to be said in favor of flying our national flag over the schoolhouse, and there is everything to be said for our teachers, from whom we expect so much, giving the boys and girls an idea, not alone of arithmetic and writing, but of Canadian history, Canadian resources, and Canadian industries; of our municipal government as well as our provincial and federal system, of how and why aldermen and school trustees and members of Parliament are elected, and of how important it is that the elections should be clean and candidates honest; of trade unions and how wages are fixed, and of ideals of honest labor for honest pay.

Ideals, like ideas, once instilled into the minds of children, stay. Particularly to-day let us call to our school teachers to remember in odd moments the wide interests of citizenship so well presented by Professor Jenks.

OUR NEW ZEALAND LETTER.

Wellington, N.Z., 13th Aug., 1906.

SINCE writing you last Sir Joseph Ward has returned to this colony, and was met everywhere with a very warm reception. Mr. Hall-Jones at once passed the reins of Government into Sir Joseph's hand, who in due course was called upon by the Governor to form a new Cabinet. A few days after, the names of the newly-appointed Ministers were published, and undoubtedly the list was greeted with satisfaction from end to end of the colony. Messrs. Tom Duncan as Minister for Lands and Chas. H. Mills as Minister for Customs were excluded; all the other members of the Cabinet have been reappointed, though some change of portfolios has taken place, and three new members have been added.

The new Cabinet is composed as follows:

The Hon. Sir Joseph Ward—Prime Minister, Colonial Treasurer, Postmaster-General, Commissioner of Telegraphs, Minister for Industries and Commerce, Minister in charge of the International Exhibition.

The Hon. W. Hall-Jones—Minister for Railways and Minister for Public Works.

The Hon. J. Carroll—Native Minister and Commissioner of Stamps and Deeds.

The Hon. J. McGowan—Minister for Justice, Minister for Mines, and Minister for Immigration.

The Hon. A. Pitt—Attorney-General, Colonial Secretary, and Minister for Defence.

The Hon. J. A. Millar—Commissioner of Customs, Minister for Labor, and Minister for Marine.

The Hon. R. McNab—Minister for Lands and Minister for Agriculture.

The Hon. G. Fowlds—Minister for Education and Minister for Public Health.

Sir Joseph has shown great care and tact in this matter, which was a very difficult problem to solve. The policy of the new Government has not yet been proclaimed, but no doubt this will be done in the course of a few days.

Proposed Reciprocity With United States.

In my previous letter I made the statement that Sir Joseph's fiscal policy would be somewhat different from Mr. Seddon's, and the news which reached this colony from New York, before Sir Joseph returned, gives color to this opinion. It was cabled out that Sir Joseph had proposed to Mr. Roosevelt a reciprocity treaty on certain lines. In return for the free admission of New Zealand wool, kauri gum and a few other lines United States paper and canned salmon would be admitted free into this colony.

In an interview with a newspaper reporter Sir Joseph spoke on the subject as follows:

> "Yes; I think it would be of great advantage to both countries if we were to send a representative of New Zealand to America during the sitting of Congress, with authority to negotiate for a reciprocal treaty in regard to a few articles exported and imported by us. The Americans are large buyers of New Zealand wool and gum. The latter is already on the free list, but something else might take its place with wool. Of course, manufactured articles cannot be considered, but there is no reason why we should not have such a treaty in regard to natural products, and the system might be adopted in regard to a couple of articles for a start. It would tend to extend the markets and prices for our products, and this would be a good thing for the colony."

Questioned as to his interview with President Roosevelt, Sir Joseph said he could not say what took place at that interview. As in the case of his audience with the King, it would, he felt, be a breach of propriety to repeat what had passed between them.

If the cable spoke the truth, it will be a matter of great importance to Canada, as paper and salmon form two of the greatest export lines to this colony. A preferential duty of 20 per cent. on paper and 1d. per pound on salmon secured practically the whole of this business to the Dominion, and if the United States are put on the same basis no doubt the bulk of this trade will return to that country.

Policy Opposed by Prominent Men.

At a dinner of the Auckland Chamber of Commerce several speakers also touched on the tariff question, and I give here a few extracts which show that at least in the northern city there is not much sympathy with an extension of the preference to foreign countries.

> Mr. J. B. McFarlane, President: "Whilst on this subject he felt called upon to speak of what appeared to him a danger which they would do well not to disregard. He referred now to any colony entering into a reciprocity treaty with a country outside the British dominions. (Hear, hear.) The danger lay in this, that such a treaty might hurt the trade of another colony, or England. Take an instance. Supposing England was taxing all meat imported except that which came from the British colonies, and she entered into a treaty with the Argentine Republic to take her meat free, or on the same terms as their own, they would naturally feel aggrieved. He considered the matter of reciprocal treaties with foreign countries should be one for the whole Empire to decide. (Hear, hear.) They wished to knit the Empire together, and one of the things which would bring them into closer relationship was preferential trade throughout the whole Empire. (Hear, hear, and applause.) He, therefore, thought it would be unwise for us at present to support any reciprocal treaty with any country not under the British flag." (Applause.)
>
> Mr. F. E. Baume, M.H.R.: "It was with great pleasure he heard a man holding the high and responsible position the President did giving expression to the outspoken remarks on preferential trade. (Applause.) He (Mr. Baume) had always been one who recognized that those who lived in this colony, especially those who were privileged to be of British birth, should remember that their interests were not bounded by the New Zealand coasts, and that they were part of an Empire, the like of which the world had never seen. (Applause.) It was their solemn duty to strive to keep the Empire together. (Applause.) It had been said, "Buy in the cheapest market and sell in the dearest." By buying in the cheapest market they were buying what was paid for in blood, sorrow and misery. It was not right that that should be their ideal; they had something besides the mere economic question to consider. They had the national prosperity of the whole Empire to consider, and even if the articles they purchased did cost a little more money, they could afford to pay a little more so long as they knew that men and women had not worked at starvation wages to drag out a miserable existence in producing those articles. (Loud applause.) They were all members of the British Empire in its entirety, and for that reason he was glad to hear the

straightforward and unmistakably sincere expression of the chairman that it was his (the chairman's) desire to see preferential trade an accomplished fact throughout the whole Empire—(loud applause)—with the whole programme of which he (Mr. Baume) was in complete agreement." (Applause.)

Though these speeches are in some way reassuring, it will nevertheless be wise to be watchful, and to draw the Canadian Government's attention to the possibility of such a change in the policy. More than likely the tariff revision will not be tackled this session, which will be a very short one, but one never knows, and a proposal of the kind brought forward of a sudden by the Premier may be passed without much opposition, as the Government commands an overwhelming majority.

If the two lines mentioned are affected the value of the preference given to Canada will not amount to much.

COSMOPOLITAN.

Failures in Canada.

Canadian Failures for the last nine months, as reported to Bradstreet's, number 901, involving $6,803,125 of liabilities, a decrease of 11.6 per cent. in number and of 36.2 per cent. in liabilities from a year ago. Failures, assets and liabilities in Canada for a period of years past follow:

	Number.	Assets.	Liabilities.
1906	901	$2,983,773	$6,803,125
1905	1,020	5,162,992	10,676,595
1904	832	3,238,256	7,696,688
1903	712	2,887,323	6,274,132
1902	851	2,759,989	6,300,413
1901	1,041	4,160,670	9,376,495
1900	1,002	3,017,784	7,441,667
1899	975	3,501,274	8,585,901
1898	1,091	3,271,772	7,592,510
1897	1,501	4,141,860	10,653,212

Industrial Bounties.

Canada's payment of industrial bounties during the fiscal year ending June 30, 1906, was $3,088,407, an increase of $229,056 over the year previous.

The heaviest earner of bounty was the Dominion Steel Company, which was paid in the last fiscal year on iron, steel and articles made from steel the sum of $957,337. The Algoma Steel Company came next with $535,190; Hamilton Steel, $200,965, and Nova Scotia Steel, $187,693.

The bounties for iron and steel earned by the several companies in 1905-6 were as follows:

Pig iron—	
Canada Iron Furnace Co	$ 40,256
Desoronto Iron Co.	13,664
Hamilton Steel and Iron Co	98,897
Dominion Iron and Steel Co	246,353
Nova Scotia Steel and Coal Co.	65,075
Londonderry Iron and Mining Co.	51,525
Algoma Steel Co.	167,420
Steel ingots—	
Hamilton Steel and Iron Co.	$ 67,578
Nova Scotia Iron and Coal Co.	96,803
Dominion Iron and Steel Co.	408,571
Algoma Steel Co.	367,770
Articles manufactured from steel—	
Dominion Iron and Steel Co.	$302,413
Nova Scotia Steel and Iron Co.	25,815
Montreal Rolling Mills Co.	7,386
Hamilton Steel and Iron Co.	34,217

ANNUAL MEETING OF THE MANITOBA BRANCH.

Mr. T. R. Deacon presided at the general meeting of the Manitoba Branch, in the unavoidable absence of Mr. E. L. Drewry. Among those present were: Messrs. L. C. McIntyre, Hugh C. MacLean, D. J. Dyson, Jas Munroe, J. E. Ruby, G. F. Stephens, R. W. Paterson, J. A. E. Wildman, W. J.Boyd, D. Ackland, W. J. Bulman, W. Hood, W. J. Hammond, P. Shea, T. R. Deacon, A. E. McLea, D. E. Sprague, John McKechnie, J. H. Parkhill, J. M. Reid, Thos. W. Erbe, Walter Martin, J. H. Knott, J. W. Driscoll, C. Vanderlip, John Leslie, A. Lock, W. R. Campbell, Capt. Munro. In all there were 42 members present.

The minutes of the last meeting were read and approved. Arrangements for the Convention constituted the chief item of business. The various committees in charge reported satisfactory progress. A number of applications for membership were approved.

The election of officers then followed. L. C. McIntyre was nominated for Vice-President. Branch officers were elected as follows: Chairman, E. L. Drewry; Vice-Chairman, T. R. Deacon; Secretary, W. J. Bulman. Executive Committee: J. W. Driscoll, A. Locke, W. L. Parrish, J. M. Reid, R. W. Paterson, J. A. Knott, W. J. Boyd, D. J. Dyson, W. S. Martin, D. Ackland, H. C. MacLean, D. E. Sprague, W. J. Hammond, R. Mackenzie, P. Shea, John Leslie, G. W. Erbe, F. Adams.

Nominations were also made for the Executive Council of the Association.

The Secretary went into the subject of convention arrangements at length, and his report was unanimously adopted.

ANNUAL MEETING B. C. BRANCH.

The Annual Meeting of the British Columbia Branch of the Canadian Manufacturers' Association was held at Vancouver on Sept. 16th. Applications for membership from three manufacturing firms were passed. The meeting then proceeded to the election of officers. Mr. John Hendry, of the B. C. Mills Timber and Trading Co., was nominated for the Provincial Vice-Presidency, and Messrs. A. C. Flumerfelt (Hastings Shingle Co.), Vancouver; Alexander McLaren (North Pacific Lumber Co.), Buckingham, P. Q.; F. W. Jones (Columbia River Lumber Co.), Golden, B. C., and A. Hinton (Hinton Electric Co., Ltd.), Vancouver, for the Executive Council. Mr. J. W. Hackett (Robertson & Hackett), Vancouver, was nominated for the Insurance Committee, but it was decided that owing to the great distance from the place of meeting it would be inadvisable to name any member on the other committees.

The officers for the Branch were elected as follows: Chairman, R. P. McLennan; Vice-Chairman, D. R. Kerr; Secretary, R. H. H. Alexander.

The Secretary gave a most encouraging report on membership. A vigorous campaign would be inaugurated during the coming year, when it was expected that many new members would be secured.

The corner-stone of the $2,000,000 ore-refining plant which the Montreal Refining and Reducing Co. are erecting at Trout Lake, near North Bay, was laid on September 10th. The smelter is an important industry for the district. It shows the confidence which is had in the mines of Northern Ontario. The plant, when completed, will have a capacity of 500 tons of ore a day. It is on the line of the T. and N.O. Railway.

AMONG THE INDUSTRIES

The Polson Iron Works will erect new buildings at a cost of $100,000.

The Foxboro' cheese factory was destroyed by fire on September 4th.

The False Creek Lumber Co., of Vancouver, will build a new sawmill at a cost of $15,000.

The Wade Manufacturing Co., of Dundas, are now manufacturing gold and silver-plated novelties.

The Peck Rolling Mills Co., Montreal, have decided to make a large addition to their plant on the Lachine Canal.

The Imperial Syrup Co., of Montreal, have established a branch in Winnipeg, under the name of the Winnipeg Syrup Co.

A manufacturer of Lima, Ohio, will establish a plant in Chatham for the manufacture of handle tools and drillers' supplies.

Beeman & Co., of Winnipeg, have commenced manufacturing office fixtures under the name of the Twentieth Century Cabinet.

The Rodney Casket Co., of Rodney, Ont., have made an assignment. The liabilities total about $12,000 and the assets about $7,000.

The Saunderson Mfg. Co., Limited, of Sydney, have been incorporated, to manufacture all kinds of roofing material. The capital is fixed at $45,000.

The name of the American Cereal Co. has been changed to the Quaker Oats Company.

The Rapid Tool Company, Limited, has been organized with a capital of $40,000. The company proposes establishing a plant at Peterborough.

The Milton Pressed Brick Co., Limited, have increased their capital to $250,000. This will permit them to make extensive additions to their plant.

The Peterboro Boiler and Radiator Company will locate in Hastings. They will receive a bonus of $5,000 and exemption from taxes for ten years.

An English capitalist will start a coal briquetting plant at Sydney, C.B. He is negotiating with the Dominion Coal Co. for the supply of suitable coal.

The Dowd Milling Company's plant at Quyon, P.Q., was destroyed by fire on September 1st. The loss will reach $125,000, with insurance of $75,000.

W. S. Rector, of the Standard-Gillett Light Co., Chicago, was in Winnipeg during the past month. His firm will establish a branch in Canada soon.

The Montreal Rolling Mills Co. have decided to erect a large nut and bolt plant and forging shop, the building to include the stores, shops and works' offices.

Development work has been started on the copper areas of Cape Breton. The Alpha Copper Co. are actively engaged in exploiting a number of leases which they hold.

Wm. Dowd and H. R. Frick are building a factory in Dorchester, N. B., for the manufacture of stoves. Three foundry buildings are now in course of erection.

Additional machinery is being installed in the flour mill of the Quaker Oats Co., Peterborough. The capacity of the mill will be increased from 600 to 1,500 barrels daily.

Dr. Charlton, of Regina, will make experiments during the next few months in denaturing alcohol. If satisfactory results are accomplished a big industry should spring up.

A malleable iron plant for the production of angle bars, light rails, etc., is a probability for Amherst, N.S. Prominent capitalists in the steel industry are behind the enterprise.

The planing mill of the C. W. Gibson, Co., Winnipeg, was destroyed by fire. The loss on building and machinery was about $6,000, and considerable lumber was also consumed.

The Philip Carey Manufacturing Company, manufacturers of all kinds of asbestos goods, will establish a $1,000,000 plant in Canada. The factory will be erected just outside of Montreal.

The Oster File Co., of Hamilton, have felt the press of increasing business, and have built a new factory on Bay and Strachan Streets. A new equipment of machinery has been installed.

The Geo. Mathews Co., Peterborough, pork packers, have reopened their factory, which had been closed for some time. The plant will be kept running steadily through the fall and winter.

The manufacturing establishment and warehouse of the Canadian Oil Company, Toronto, were destroyed by fire recently. The loss was very heavy, though it was mostly covered by insurance.

A large extension to the plant of the Dominion Textile Company at Montmorency, has been decided upon. The output of the yarn mills will be increased from 2,000,000 to 4,000,000 pounds a year.

The Northwestern Packing Company has been incorporated at Winnipeg, with an authorized capital of $1,000,000. It is the intention of the company to establish stock-yards and a packing plant at Winnipeg.

Incorporation has been granted the P. J. Powers Company, Limited, of Ottawa. The company will manufacture tools, boilers, machines, etc., and will do a general foundry business. They have a capital of $46,000.

The Majestic Wire Fencing Co., of Michigan, will erect branch factories in Winnipeg and Edmonton. They will manufacture all kinds of farm and lawn fencing and wire fabric for the reinforcement of cement.

The E. K. Watson Company, Limited, is a new company, which will manufacture and deal in machinery, implements and hardware in general. The authorized capital is $20,000, and place of business, Montreal.

The Ferrosteel Co., of Cleveland, Ohio, manufacturers of warm-air furnaces and furnace registers, are contemplating the establishment of a branch plant in Canada. Sites have been investigated in London.

Jenkins Bros., of Bridgeport, Conn., and Elizabeth, N.J., are erecting a large plant for the manufacture of valves at Cote St. Paul, Montreal. The machinery has been ordered and will be installed by April next.

The Iroquois Motor Car Company, Limited, has been incorporated with a capital of $96,000. The company, whose place of business is Ottawa, will manufacture and deal in automobiles, motor boats and vehicle supplies.

The Montreal Steel Works will erect a large plant for the manufacture of manganese castings, which will give employment to two hundred men. A new power plant and an extension to the present factory are also contemplated.

Openings in Australia.

The demand for Canadian goods in Australia is evidently quite active if the enquiries received at this office are any indication. During the past month several letters have come to hand from commercial travelers, commission houses and manufacturers' agents, all anxious to extend their connections with Canadian houses, and all reporting excellent openings for goods that are properly pushed.

One correspondent, who comes well recommended, and who claims to have had nine years successful experience as a commercial traveler in all parts of Australia, displays a degree of enterprise that is worthy of recognition..

His plan is to secure the agency for a number of prominent Canadian manufacturers, one in each principal line of trade; to procure samples; to canvass the country thoroughly and ultimately to establish show rooms in Sydney or Melbourne. In the meantime traveling and other expenses would be shared pro rata by the different firms subscribing to his proposition. In this way the cost to each would be comparatively small, while the wide connections this party already enjoys with the trade generally would enable him to produce results impossible in any other way.

The likelihood of a preferential tariff being arranged between Canada and Australia makes the question of an Australian reperesentative one of considerable importance to the Canadian manufacturer, and those who are still without connections in that country would do well to get in touch with the parties from whom propositions have been received. Their addresses may be had on application to the Secretary, C. M. A., Toronto.

Paper for China.

An enquiry has reached us from a large importing house in Shanghai, China, for Canadian paper. It appears that there are splendid openings at the present time in that market for all kinds of printing paper, and Canadian manufacturers are urged to take advantage of the same. For the guidance of those who may care to take the matter up, a small set of samples have been supplied us, showing the line most generally in use, with full particulars as to the size weight, and number of sheets to the ream. Our correspondents are satisfied, however, of their ability to market any good line, providing prices are right, owing to their well established connections with the large printing houses in Shanghai. Their address will be gladly supplied on application.

A Unique Service.

The Canadian Pacific Railway Company has inaugurated a combined water and rail service from England to Asia which is unique in several particulars. The idea of a route of twelve thousand miles, half way around the world, under one flag and by one company, is stupendous. No less bewildering is the idea of making this enormous distance in less than thirty days. Canada's position in this service must bring her prominently to the fore. A Canadian company has brought to perfection this gigantic organization.. It is a development throughout of the old national road of Canada. It was but as complements to this that the steamship lines on the Atlantic and Pacific were established. Moreover, the only land covered in the route is Canada, which is traversed border to border. Only two changes are necessary in the long trip, from the boat to the train at Quebec and from the train to boat at Vancouver. The trip provided by the C.P.R. on a single ticket is as follows:—

	Days.	Miles.
Liverpool to Quebec	7	2,661
Quebec to Vancouver	4	3,072
Vancouver to Hong Kong	19	...
Vancouver to Yokohama	..	4,283
Yokohama to Shanghai	..	1,178
Shanghai to Hong Kong	..	810
Totals	30	12,004

The first trip has been made successfully in a trifle over twenty-nine days.

A Political Movement.

Because the United States Congress refused to pass an anti-injunction bill at the dictation of the officers of the Federation of Labor certain members, including Speaker Cannon, have been placed on the unfair list, and their election is being opposed by Samuel Gompers. Mr. Cannon, addressing a meeting on behalf of Mr. Littlefield, discussed the whole situation as follows:

"Mr. Samuel Gompers has come into your district and demanded the defeat of Chas. E. Littlefield, your represenative in Congress—not because Mr. Littlefield has failed to properly represent the people of this district, or even the workingmen here, but because he has failed to comply with the demands of Mr. Gompers, who claims to be a citizen of New York and a resident of Washington. Mr. Gompers has introduced a new element into American politics. He does not exercise the right of petition; he demands that Congress enact into law his will. He does not come here to argue; he publishes a decree in the name of labor that the public official who refused to obey his command shall be retired from public life.

"I have no prejudice against the Federation of Labor. My sympathies are with it in all efforts and struggles to improve the material condition and secure a larger share of the profits of production for wage-earners. I do not, however, believe in proscription in politics. It is foreign to our institutions, foreign to a Government of the people. I am opposed to Mr. Gompers' political methods of blacklisting men who vote as their consciences and judgment and the welfare of their constituents dictate.

"Mr. Gompers has a grievance against your representative, as he has against President Roosevelt, myself and forty or fifty other men in public life. We refused to disregard our oaths of office and enact legislation which Mr. Gompers demands. He is aggrieved because Congress would not enact an anti-injunction law which he approved and declared constitutional. Some men, among them your representative and myself, did not believe the proposed law to be either constitutional or fair to all the people.

"Mr. Gompers has blacklisted us because Congress failed to pass that law. He has read us out of civilization. But, speaking for myself, I had rather quit public life now, and at the age of seventy, quit forever, true to the civilization we have developed, true to the distribution of powers to the legislative, the executive and the judiciary, which are a check upon each other, than to retain public office at such a sacrifice to my own self-respect and such a terrible cost to the country."

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the name of enquirers, apply by number to the Secretary, of Toronto.

34 **Agencies.**—A firm in **London, England,** would be glad to undertake the representation of a few first-class Canadian commercial houses and invites correspondence.

35 **Apples.**—A **Hull, England,** firm of fruit brokers doing a large import trade in apples, desires to get in communication with shippers of Canadian apples on commission; highest bank references furnished.

36 **Apples, Evaporated.**—A firm of commission merchants in **Hamburg, Germany,** established 1865, desires to be placed in touch with Canadian houses able to supply evaporated apples in regular shipments.

37 **Ash Plank.**—A **Hull, England,** firm desires to get in touch with Canadian exporters of seasoned ash plank. Sizes: 24 inches by 30 inches long, by 4 inches to 6 inches thick.

38 **Bacons, Hams, Apples, etc.**—A **Glasgow, Scotland,** firm of wholesale produce merchants invites correspondence from Canadian producers of bacons, hams, hides, tallow, and hog hair, and also from shippers of apples seeking trade in Scottish and North of England markets.

39 **Beans.**—A **London, England,** firm interested in the import of Canadian beans desires to get into touch with producers and exporters.

40 **Bone Meal, Hoof and Horn Waste.**—A **French** firm is in a position to buy bone meal, hoof and horn waste, meat meal, shoddy.

41 **Box Shooks.**—A **Manchester, England,** firm capable of handling very large quantities, asks for prices and dimensions of box boards from Canadian manufacturers.

42 **Broom Locks, Broom Covers and Broom Factory Supplies.**—A firm in **British Columbia** manufacturing brooms, desires to procure its supplies from Canadian sources, and invites correspondence from interested parties.

43 **Buggies and Dog Carts.**—Illustrated price lists covering the above lines are requested by a reliable firm in **Charlestown, Nevis, B. W. I.**

44 **Buttons, Cottons, Oilcloth, Wallpaper, Harness, etc.**—Enquiry is made for the above lines by a correspondent in **Denia, Spain,** who is desirous of securing agencies. Local references supplied.

45 **Canned Lobster, Salmon, Fresh Apples.**—The Montreal agent of a large importing firm in **Antwerp,** wishes to hear from Canadian shippers of the above. Business to be done on a strictly cash basis through an Antwerp bank.

46 **Canned Meats, Fish.**—A large importing house in **Kingston, Jamaica,** well-known to the Association asks for quotations on the above f.o.b. Halifax. Canadian bank reference.

47 **Closet Seats.**—A manufacturers' agent in **Burnley, England,** asks for catalogues and best export prices on the above.

48 **Compressed Yeast, Baking Powder.**—A **Cape Town, South African** firm, desires to correspond with a Canadian manufacturer of compressed yeast and baking powder.

49 **Cream Separators.**—A **London, England,** firm with branch at Manchester asks for prices of mechanical cream separators from Canadian manufacturers.

50 **Dough Mixer.**—A **Cape Town, South African** firm, desires to get into touch with a Canadian manufacturer of a dough-mixing machine for household use.

51 **Dressed Flax.**—Representatives of the Association in **Berlin, Germany,** report a good opening for Canadian flax, and ask to be placed in touch with reliable houses in a position to supply same.

52 **Envelope Paper.**—A firm of wholesale stationers and envelope manufacturers in **Ireland** desires to get into touch with one or two firms in Canada manufacturing envelope paper.

53 **Flour, Cheese, Salmon, etc.**—Enquiry is made for the above lines by a correspondent in the **Transvaal,** who is anxious to establish connections with Canadian supply houses.

54 **Groceries.**—A **Glasgow, Scotland,** correspondent has asked to be referred to likely firms in Canada who are in a position to ship goods to Great Britain suitable for the grocery trade.

55 **Hay.**—A **Yorkshire, England,** firm of hay importers asks for names of shippers of Canadian hay and invites correspondence with definite prices for shipments of timothy and clover hay; either c.i.f. Hull or f.o.b. Canadian ports.

56 **Hay, Oats.**—A **Leeds, England,** hay merchant, requiring from 10 to 12 tons per week, also oats in large quantities, invites correspondence with Canadian sellers. Quotations c.i.f. Leeds.

57 **Hay and Apples.**—A **Yorkshire, England,** firm of hay merchants desires to hear from shippers of Canadian hay and apples with facilities for large regular trade.

58 **Hospital Furnishings.**—Catalogues and prices are asked for all kinds of furniture and fittings necessary to equip a new hospital in **Central Ontario.**

59 **Leather.**—A commission house in **Brussels, Belgium,** in business for more than ten years, and with a wide connection among wholesalers and manufacturers, is open to represent a few first-class dealers in boot and shoe leather, box-calf, kid, etc.

60 **Navvy Barrows.**—A **Manchester, England,** firm wishes to obtain prices c.i.f. Manchester, of navvy barrows from Canadian manufacturers.

61 **Ores.**—A firm of brokers in **Manchester, England,** are open to entertain propositions from Canadian shippers of all kinds of ore, including cobalt, nickel, vanadium, wolfram, molybdenum, manganese, phosphate of lime and copper matte.

62 **Picks, Shovels, Sanitary Appliances.**—A firm of manufacturers' agents in **Winnipeg** are prepared to purchase the above for cash in car lots.

63 **Pulp, Shavings, Hay, Oats.**—A large pulp company in Quebec are open to buy bleached spruce pulp, hard white shavings, pressed hay and oats in carload quantities. Dun rating.

64 **Pulp-Wood Middles, Facing Paper.**—A correspondent in **Peterborough, Ont.,** manufacturing cards and photo mounts, makes enquiry for the above.

65 **Salt Fish (Cod and Haddock).**—An old established commission house in **Calamata, Greece,** desires to get in touch with Canadian exporters of the above; prices are asked c.i.f. Calamata. Terms, cash against documents. Good reference supplied.

66 **Spruce.**—An agency for Canadian spruce lumber is desired by a firm in **London, England.**

67 **Stove Fittings.**—A provider to the dry goods trade in **Nottingham, England,** desires to purchase at 30 days all kinds of time and money-saving appliances and novelties suitable for that business. Local references.

68 **Tin Box Machinery.**—A **London, England,** firm asks to be supplied with prices and full particulars regarding automatic tin box-making machinery by Canadian manufacturers of same.

69 **Tobacco.**—Enquiry has been made by the tobacco department of a large co-operative store in **London, England,** respecting supplies of plug and cut smoking tobacco from Canada.

70 **Veneers.**—A **Glasgow, Scotland,** firm wishes to get into communication with makers in Canada of wood boards made up of three or more thin layers of wood laid crosswise and supplied in large-sized pieces.

71 **Washing Machines.**—A **Manchester, England,** firm wishes to get prices of washing machines from Canadian manufacturers.

72. **Wheels, Spokes, Rims, etc.**—A **Manchester England,** firm of wagon-makers wishes to obtain prices and description of cart wheels from Canadian manufacturers.

73 **Wire Baskets.**—Quotations are requested by a dairy company in **Liverpool, England,** on one gross wire baskets, to carry 6 quart milk bottles each. Specifications will be forwarded on application to this office.

74 **Wire Nails.**—A reliable firm in the **British West Indies,** at present purchasing from New York, are prepared to buy the above from Canadian houses that will meet the competition. Quotations f.o.b. Halifax.

75 **Wood Alcohol.**—**Manchester, England,** firms importing wood alcohol ask for prices from Canadian manufacturers.

Machinery Manager and Salesman.

A smart, energetic and reliable business man, a good salesman and accountant, seeks position with a reliable firm manufacturing dairy, engineering or farm implements, domestic machinery, tools, or engineers' stores. He has had twenty years experience, two of which were spent in Calgary. Could invest small amount, if desired. Address A. B., care of this office.

Situation Wanted.

A single man, for many years manager of a well- known sealskin mill, figured and plain, for curtains and upholstery, seeks situation or partnership. Address C. C., care of this office.

Would Represent Firms in West.

A man of varied business experience, long resident in Manitoba, having an office in Brandon; thoroughly responsible and conversant with Western Conditions, would represent first-class manufacturing or financial concern. Could travel part of time. Best references. Address box 393, Brandon, Man.

WE MANUFACTURE IN WINNIPEG

SEND FOR CATALOGUE AND PRICES IF INTERESTED

WINNIPEG CEILING AND ROOFING CO.

WINNIPEG - - MAN.

CORRUGATED IRON

All Gauges, Painted and Galvanized

"V" CRIMP & PRESSED SEAMED ROOFING

METAL SIDING, ETC.

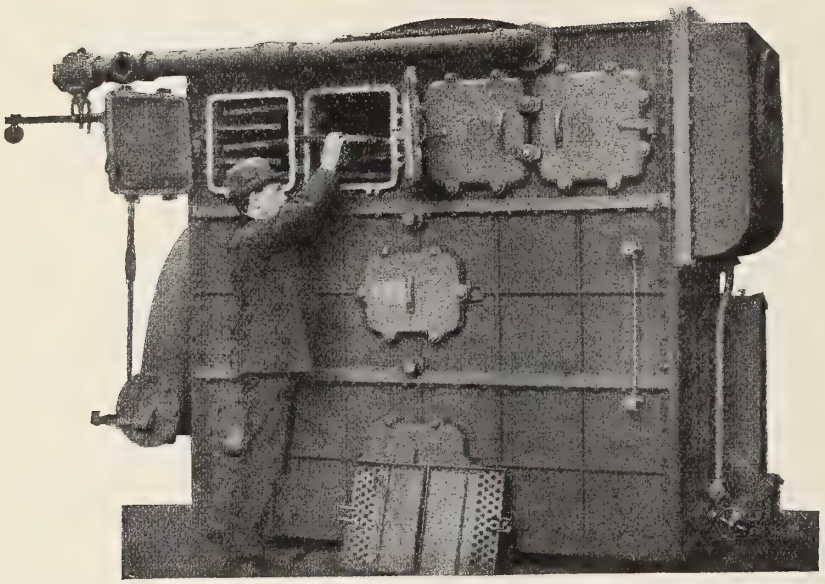
CORRUGATED CONDUCTOR PIPE

METAL CEILINGS

METAL WINDOWS

CORNICES AND SKY-LIGHTS

Cochrane Heaters



Prolong life of Boilers, Reduce Expenses, Save Time and Repairs, Eliminate Contraction Strains.

Can be cleaned in half an hour

. . . FOR SALE IN CANADA BY . . .

Canada Foundry Company, Limited

Head Office and Works :

TORONTO - - ONTARIO

DISTRICT OFFICES : Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland.

Gendron Mfg. Co., Limited.

Our Reed and Rattan Furniture

FOR THE COMING SEASON

IS NOW ON EXHIBITION



They are dainty in design, thorough in workmanship, and perfect in finish.

Children's Sleds & Sleighs

Our line is the most complete ever offered the trade.

Catalogue grade "F" contains all descriptions and cuts.





For the **CHRISTMAS TRADE** a full line of

Doll Carriages, Go-Carts, Cradles, Shooflies, Wagons, etc.

Catalogues grade "D" and "E" show the complete line.

GENDRON MFG. CO.,
LIMITED,
TORONTO.

The Busy Season

Is now on—Trade is reviving—Your business feels the stimulus.

In planning your campaign to make your Fall Trade a **Money maker,** have you fully considered the

Most Potent Factor

in the successful continuance of a business?—

Advertising

The News—Can give you a clientele through its advertising columns **stronger** than that of any other Evening Daily in Ontario.

The News—Is read by the **thinking** man, the **moneyed** man, the man whom **you wish to know about the goods** you have to sell.

The News—Is sent daily into over **70%** of the Post Offices throughout Ontario.

The News—Asks for its space a **flat rate of 4 cents** per line. We want all the business all the time, but because we know that **returns will come,** we ask 4 cents per line **for the space you want to use.**

The News—Through its **Want Columns,** can get you anything you want—**Machinery, Clerks, Book-keepers, Mechanics, &c. ONE CENT** a word.

The News—places at your disposal **its experience, its time** and **its space** with regard to anything in relation to Advertising.

WRITE FOR ANY INFORMATION TO

The News

Toronto

The best paint and varnish business in your locality is yours if you are a *Sherwin-Williams* agent.

The dealer who handles our line of paints and varnishes builds up a better business in his locality than his competitors. The reason is simple. We get behind him, co-operate with him, and *push* for him through our advertising and selling helps in a way that never fails to draw trade. We are not satisfied to merely make the best paints and varnishes that can be made and put them on the dealer's shelves. No matter how good the line may be, attention must be called to its merits if a profitable trade is to be built up. We use every resource at our command to enhance our agents' selling possibilities. The result is, of course, mutually beneficial. Today we are the largest paint and varnish makers in the world, and this is abundant proof that consumers find our goods satisfactory and that our agents appreciate our trade-winning methods in conducting their business.

If we had room here we would explain what our methods are; how they create business, hold it and keep adding to it. You would be astonished at the scope of our personal letters, booklets, folders, mailing cards, posters, field signs, inside store helps, window displays, newspaper electros, and the special helps given by our promoting departments. We publish a monthly magazine, too, filled with helpful suggestions and live matter of value to our agents. *And all of this service is free.*

Advertising and selling helps are but a part of the total force we put behind S-W. agents. There is the paint and varnish knowledge of our organization which insures products that are right—you can tell your customers that they will do what they are made to do. There is, too, the direct interest of our selling force and our office force in you—for our agency proposition is the backbone of our business. You become a direct factor in an organization embracing five large plants, fifteen large warehouses and offices in 20 principal cities, an army of representatives, our own linseed oil mills, large lead and zinc mines, the largest dry color plant in the country, varnish, japan and drier works, tin can factories, box factory, printing plant, machine shop, screw steamship, etc.

These facilities enable us to control the quality of the material we use and to make all accessories. We are sure of our products from beginning to end, and we are in close touch with every part of their manufacture. Through these facilities, too, we are enabled to save much in cost of manufacture and make it possible to give greater value and service for the money. Our agents get the benefit.

Remember that ***Sherwin-Williams Paints and Varnishes,*** backed by Sherwin-Williams methods and advertising, and a live, energetic dealer, can get the best business of any locality where paints and varnish are sold.



If you are not handling our products now, write us today. We will tell you how to become a Sherwin-Williams Agency.

THE SHERWIN-WILLIAMS CO.

PAINT AND VARNISH MAKERS.

Canadian Headquarters and Plant: 639 Centre Street, Montreal, Que.
Warehouses: 86 York Street, Toronto; 147 Bannatyne Street, East, Winnipeg, Man.



1734

FREYSENG CORK CO.

LIMITED

Head Office - - TORONTO



Toronto Factory :
Queen and Sumach Streets
Toronto, Ont., Canada



Montreal Factory :
665-661 St. Paul Street
Montreal, Que., Canada

Manufacturers and Importers of

MACHINE CUT **CORKS** HAND CUT

Corking Machines. Capsule Machines.
Bottle Capsules. Bottle Baskets. Bottling Wire.
Sealing Wax. Tin Foil---Plain and Colored.
Cork Life Preservers and Ring Buoys.

AGENCIES— VANCOUVER, B.C. WINNIPEG, MAN. ST. JOHN, N.B.
QUEBEC, P.Q. OTTAWA, ONT. HALIFAX, N.S.

STANDARD SILVER COMPANY

LIMITED



FACTORY AND SHOWROOMS—31-43 HAYTER STREET

MANUFACTURERS OF HIGHEST QUALITY

ELECTRO-PLATED SILVERWARE

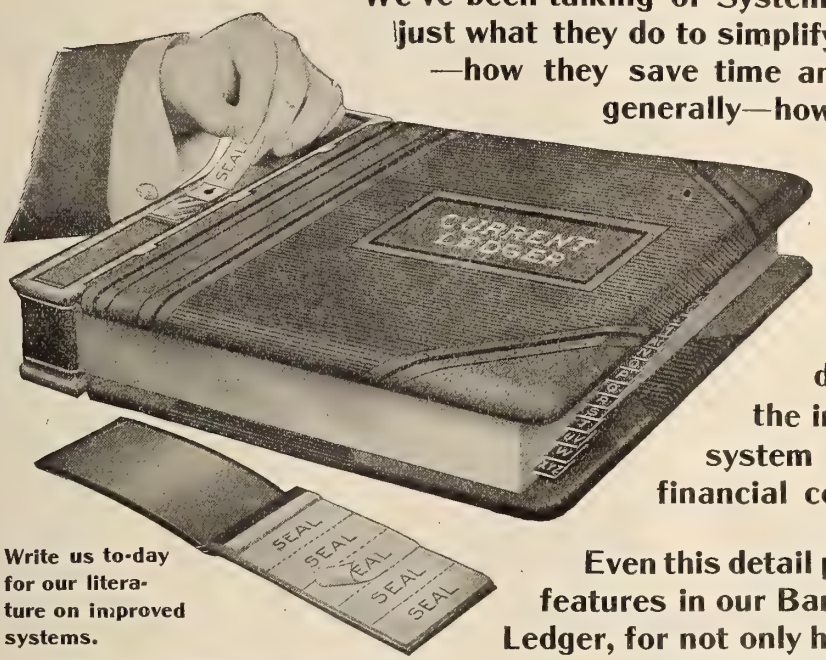
We have a large factory, equipped with modern machinery and skilled workmen, and our aim is to turn out goods equal to the best produced anywhere.

Every article bearing our trade mark is guaranteed to wear satisfactorily.

Catalogues furnished on request.

TORONTO, - CANADA.

DETAILS OF BUSINESS



We've been talking of Systems for Business—just what they do to simplify your accounting—how they save time and facilitate work generally—how they help you to understand at once the condition of your business.

The ledger is a detail, but always the important end of a system for wholesale or financial concerns.

Write us to-day for our literature on improved systems.

Even this detail possesses special features in our Bank-Seal Perpetual Ledger, for not only has it almost indestructible binding and special paper, but a safeguard feature in a patented lock and seal. After the seal is placed the ledger cannot be opened without the key first passing through the seal.

The Bank-Seal Ledger is built to stand the wear and tear that comes to any book in continual use. The back is made entirely of tested metal, the covers of staunch board, heavily covered with corduroy and full leather and attached to the back with metal hinges. This hinge insures a flat opening.

When ordering a new ledger enquire about the Bank-Seal. It will pay you to consider it.

THE COPELAND-CHATTERSON CO. LIMITED

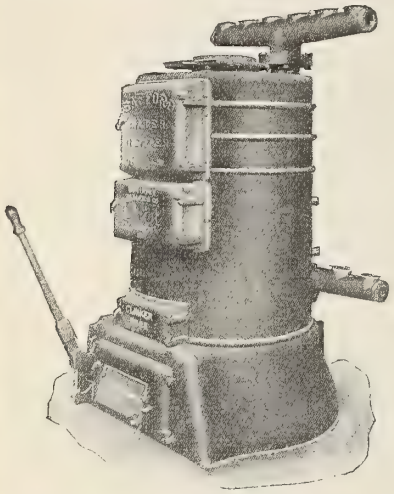
Devisers and Manufacturers of Systems for Business.

General Office : Toronto - - - - Works : Brampton

Montreal - Liverpool, London and Globe Building
Winnipeg - - - 141 Bannantyne Ave. East
Ottawa - - - - 14 Citizen Building
London, Eng. - - - 43 Cannon St., E.C.
European Factory - - Stroud, Glou., Eng.

The "Safford" Hot Water Boiler

Has developed a higher efficiency and greater heating capacity, relative to its fuel consumption, than any other Boiler on the market. It meets every requirement of up-to-date Hot Water Heating, and can be relied upon to perpetuate that enviable reputation which the "Safford" Radiator now enjoys.



Its fire-pot is constructed to hold sufficient coal to provide ample water circulation for proper amount of radiation, for not less than 8 hours with least amount of caretaking.

A certain volume of the hottest water quickly circulates upward directly to the mains and radiators, without circulating through all the sections, thus insuring quick results at radiators.

It has cast-iron machine turned nipple joints, insuring a perfect joint, and obviating the necessity of taking down the Boiler every few years to be regasketed or repacked.

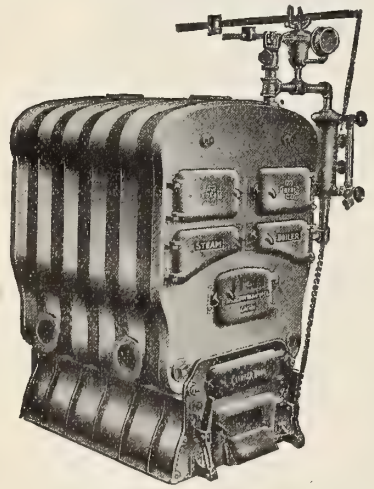
It is very low in construction permitting its erection in low cellars without a pit.

It illustrates economy of fuel in the highest degree.

Only scant attention needed to the firing.

The "Triumph" Steam Sectional Boiler

Is the climax of scientific skill in Steam Heating appliance, having the largest fire-to-water surface possible.



It maintains heat for 8 hours in coldest weather.
Maintains heat 12 to 20 hours in moderate weather.
Has ample combustion chamber between fuel line and crown sheet.
It utilizes the highest possible percentage of fuel power.
It has a large door level with grate for cleaning fire with slice bar.
An exceedingly easily managed shaking and dumping grate.

The "Safford" Hot Water Boiler or the "Triumph" Steam Boiler when combined with "Safford" Radiators form a matchlessly satisfactory and economical heating system for the largest Institution or the smallest house,—a heating system that rightly merits and wins the unqualified commendation of both heating engineers and users.

Illustrated Catalogue mailed free to any address on application.

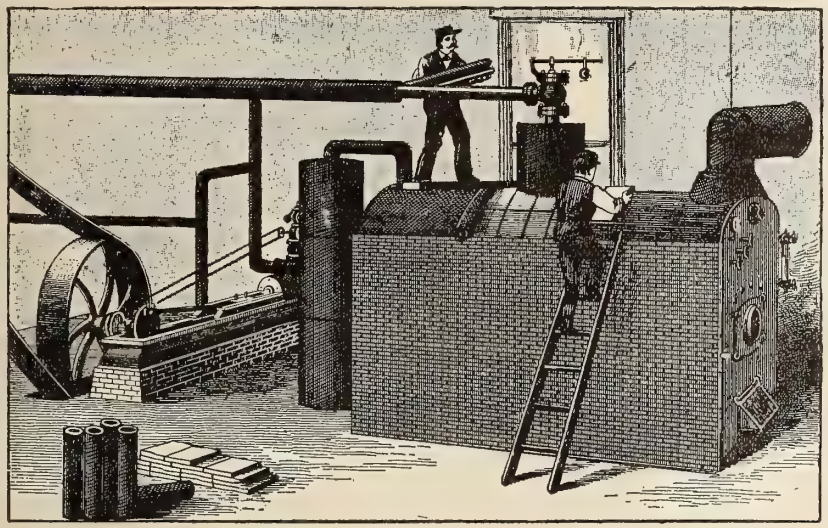
THE DOMINION RADIATOR CO., LIMITED

HEAD OFFICE: TORONTO

BRANCHES:—MONTREAL, QUEBEC, ST. JOHN, N.B., WINNIPEG, VANCOUVER, LONDON (England), EDINBURGH, GLASGOW, ANTWERP, BERLIN, CHRISTIANA, AUCKLAND, N.Z., JOHANNESBURG, S.A.

Are Your Steam Pipes Insulated?

If NOT You are BURNING MONEY



A GOOD Covering

Pays for itself in one season, and is a revenue producer indefinitely

The Best is Cheapest

WE HAVE IT

We are the Largest Manufacturers in Canada of

PIPE AND BOILER COVERINGS, ASBESTOS CEMENTS, ETC.

Also Dealers in

MINERAL WOOL for Insulating Heat, Cold and Sound.

PAROID and other **ROOFINGS**

Insulating Papers and Materials .

ENGINE
SHEET
GASKET } **PACKINGS**

ASBESTOS Paper, Mill-Board and Rolled Board, Rope, Wick and Twine

SOLE CANADIAN AGENTS FOR

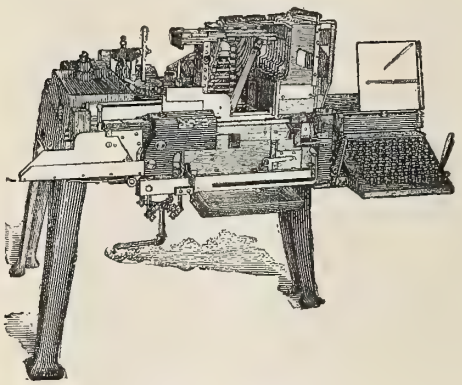
Viscos for Belts = Ferrubron Metal Paint

EUREKA MINERAL WOOL & ASBESTOS CO.

118 ADELAIDE STREET WEST, TORONTO, ONTARIO

The Monoline

500 in Use.



$1,250

A speedy, cheap machine, adapted especially for the small newspaper and job office, but used by a number of large offices.

Will cast any length of line from 6 ems to 21 ems, and set any face from Agate to Long Primer.

SUCCESSFULLY USED BY

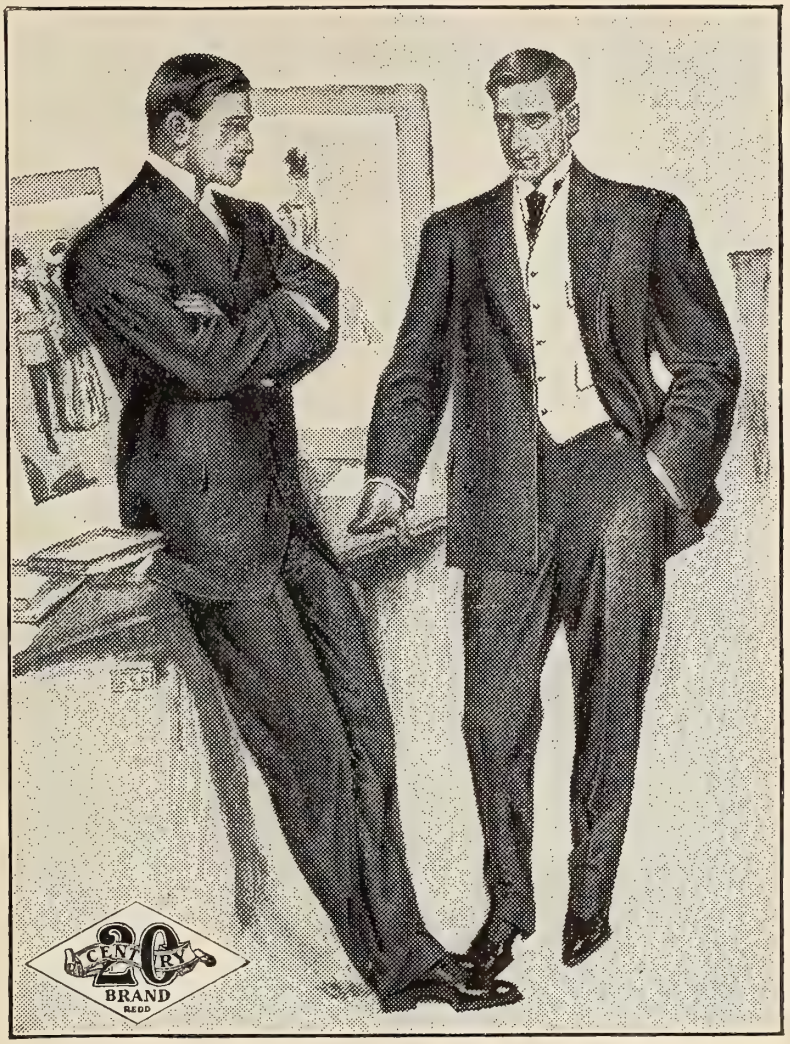
Le Canada, Montreal
La Patrie, Montreal
Daily Record, Sherbrooke
Chronicle Publishing Co., Halifax
Journal, Edmonton
Herald, Fredericton
Stevens & Heath, Toronto
McLean Publishing Co., Toronto
Sentinel Review, Woodstock
L'Avenir de l'Quest, Winnipeg
The Standard, Regina
And many others

WRITE FOR FURTHER PARTICULARS.

CANADIAN COMPOSING CO., Limited

On Account of Mergenthaler Linotype Co. of New York,

587-607 Beaudry Street, - - - - - MONTREAL, Canada



20th Century Brand Clothes

Are now being Sold in

98 CITIES AND TOWNS IN CANADA'S GREAT WEST

IS YOUR TOWN IN THE LIST?

If not say the word N O W and our Traveller will call

——TAILORED BY——

THE LOWNDES COMPANY, Limited

TORONTO

CANADA'S PREMIER PIANO

The

Gerhard Heintzman Piano

is conceded to be the best instrument made in Canada

GERHARD HEINTZMAN, LTD.

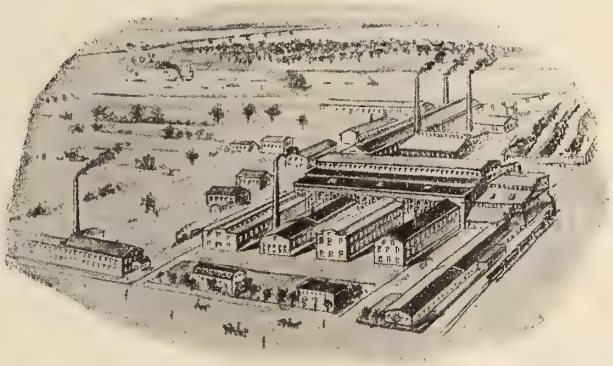
TORONTO

Factory:
Sherbourne Street

Salesrooms:
97 Yonge Street

DOMINION WIRE MANUFACTURING CO., LIMITED

HEAD OFFICE—
Coristine Building, Montreal



WORKS—
Lachine, P.Q.

XIXth CENTURY

CANADA HAD TO DEPEND TO A LARGE EXTENT ON THE ENGLISH, GERMAN AND UNITED STATES MARKETS FOR HER SUPPLIES

MANUFACTURERS

For Home & Export Trade

OF

IRON AND STEEL WIRE
All Kinds. All Sizes.

GALVANIZED WIRE
For Fencing, Telegraph and Telephone Purposes.

BRASS & COPPER WIRE
Pure Copper Wire for Electrical Purposes.

WIRE NAILS
All Kinds.
In Kegs, Boxes and 1 lb. Papers.

STAPLES
Fence, Poultry Netting,
Bed, Blind Staples.

WIRE COAT AND HAT HOOKS

WOOD SCREWS
Flat, Round and Oval Heads,
Iron, Brass, Bronze and Nickel Plated.

JACK CHAIN
Steel and Brass,
Single and Double.

WIRE DOOR PULLS

BRIGHT WIRE GOODS
Screw Hooks, Screw Eyes, Gate Hooks and Eyes.

SPRING COTTERS,
STEEL WIRE BARREL HOOPS

XXth CENTURY

CANADA'S FACTORIES ARE TO-DAY CAPABLE OF SUPPLYING CANADA'S DEMANDS WITH SOMETHING TO SPARE FOR OUR BROTHERS ACROSS THE SEAS

ENQUIRIES FROM ANY PART OF CANADA OR THE COLONIES WILL RECEIVE PROMPT ATTENTION.

THE
CANADA PROCESS COMPANY
Limited

Manufacturing and Importing Chemists

Office and Works: QUEEN'S WHARF

BATHURST ST. TORONTO

SPECIALTIES:

CARBONIC ACID GAS "ZENITH BRAND"
GLAUBER'S SALT
HYPOSULPHITE OF SODA
BISULPHATE OF SODA
SULPHURIC ACID
MURIATIC ACID
NITRIC ACID

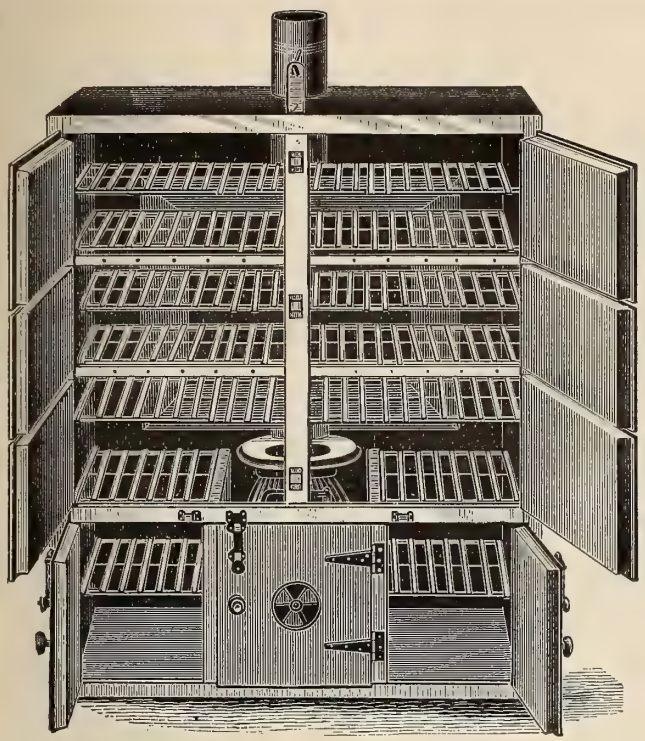
And Specialties for Tanning, Dyeing, and Woollen Industries

EVERYTHING THE HIGHEST QUALITY

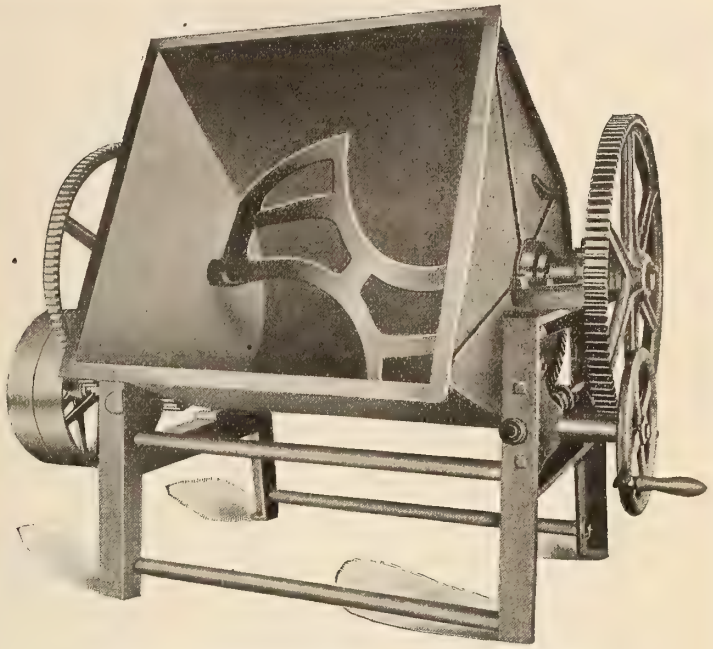
DON'T FORGET THE NAME

The Canada Process Company, Ltd.

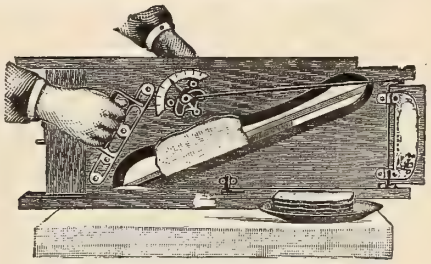
QUEEN'S WHARF, BATHURST STREET, TORONTO



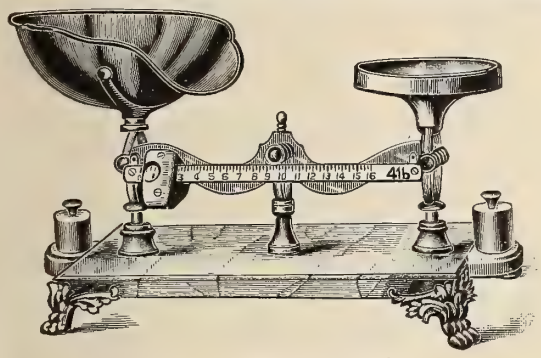
BAKERS' PORTABLE OVEN——WE HAVE OTHERS



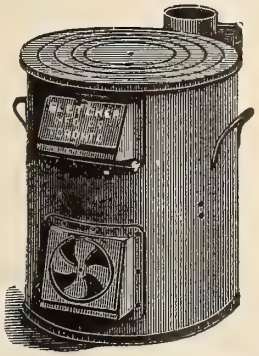
DOUGH MIXERS AND BREAD MAKING MACHINERY



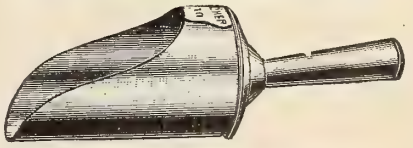
BREAD AND MEAT SLICERS—ALL KINDS



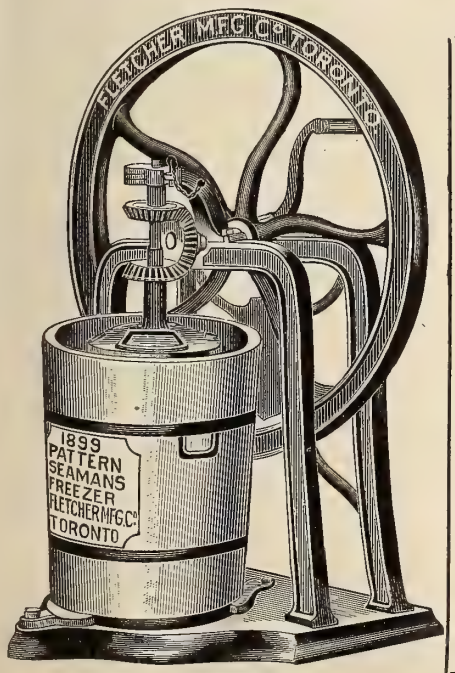
SCALES OF ALL KINDS



CANDY MAKERS' STOVE



GROCERS AND CONFECTIONERS SCOOPS



ICE CREAM FREEZERS—ALL KINDS

These are some of the things

WE MAKE

We also make

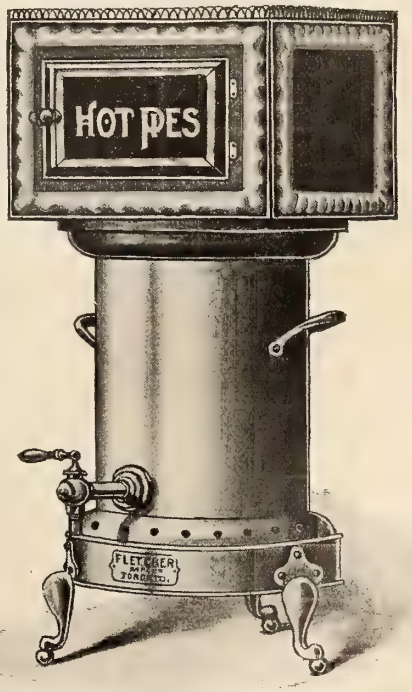
SODA FOUNTAINS IN SILVER, ONYX OR MARBLE

SEND FOR CATALOGUE

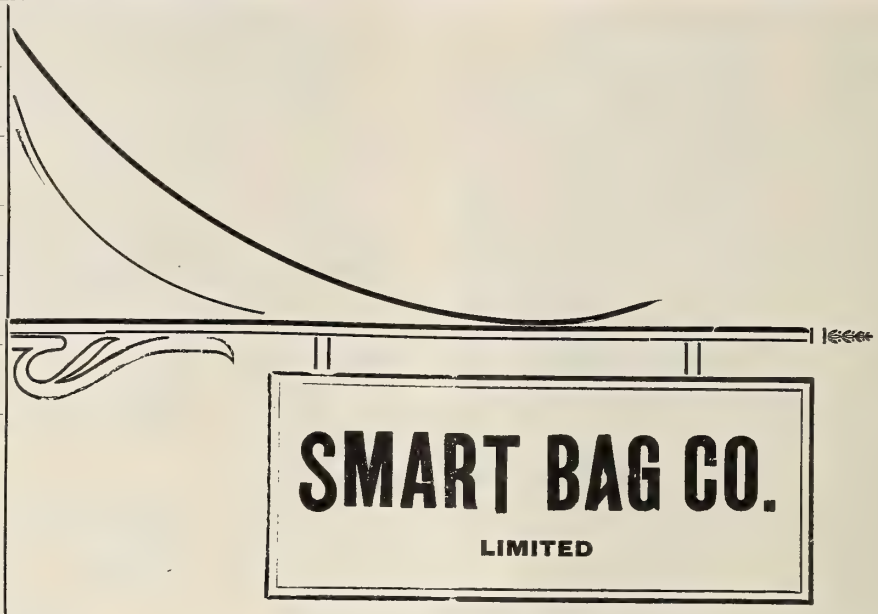
FLETCHER MFG. CO.

440 and 442 Yonge St.

TORONTO - CANADA



TEA, COFFEE, AND HOT WATER URNS



We manufacture Jute and Cotton Bags of every description.

Our Printing Departments being right up-to-date, we are able to make a specialty of Bag Printing.

Having factories at Montreal, Toronto and Winnipeg, we are able to give our customers very prompt service.

We aim to give entire satisfaction.

Be sure and get our prices before placing order elsewhere.

FACTORIES AND OFFICES:
MONTREAL — TORONTO — WINNIPEG
HEAD OFFICE:
MONTREAL

CANADIAN CANNED MEATS

We beg to announce the opening of our Canned Meat Department in October. Our aim is to place upon the market Canned Meats of finest quality, wholesomely prepared under the most favorable conditions - - - -

THE GEO. MATTHEWS CO., LIMITED
BRANTFORD - HULL
PETERBORO - Canada

Matthews' "LITTLE CHEF" Canned Meats will be in a class by themselves - -

Try a sample order through your wholesale house

THE GEO. MATTHEWS CO., LIMITED
BRANTFORD - HULL
PETERBORO - Canada

By Royal Warrant

"Canadian Club" Whisky

Fully Ripened in Wood. Age Guaranteed by Government

QUALITY UNEXCELLED

Distilled and Bottled by

HIRAM WALKER & SONS

LIMITED

Walkerville, Canada

LONDON CHICAGO NEW YORK MEXICO CITY VICTORIA, B.C.

Your Book-Keeper Can Do Twice As Much.

BUSINESS SYSTEMS LIMITED
SYSTEM THE SECRET OF SUCCESS
TORONTO.

The end of every month with its accumulation of bills to be sent out, throws your book-keeper behind.

Then he's a week or ten days again catching up.

And in the rush, there's always a chance of making mistakes.

▪ ▪ ▪ ▪ ▪ ▪

Our Monthly Account System, especially adapted to retailers, will stop this.

Our Monthly Account System makes out your bills during the month at the same time that the entries are made in your books.

▪ ▪ ▪ ▪ ▪ ▪

A request for information about how this is done, will not obligate you to buy.

Write us about it,

To-day.

BUSINESS SYSTEMS
LIMITED
90 SPADINA AVE.
TORONTO, CANADA

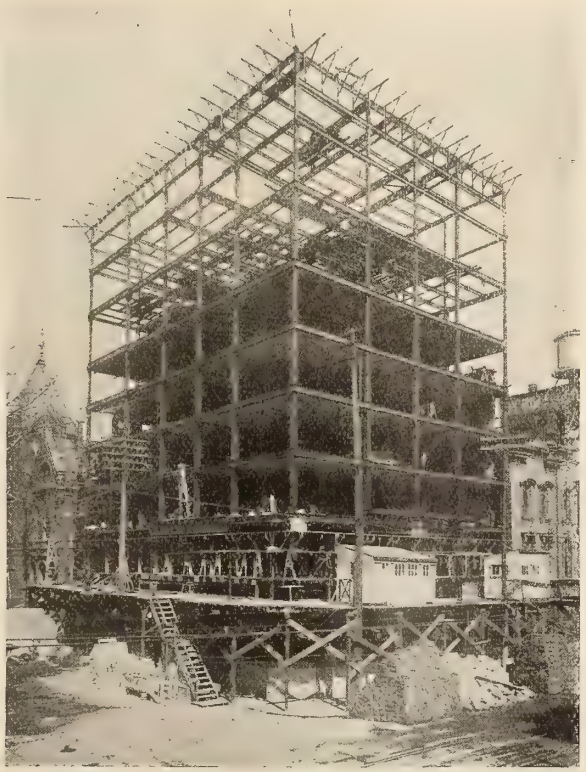
FOR BRIDGES AND GIRDERS

Structural Steel - -

FOR ROOFS AND BUILDINGS

5,000
TONS OF STEEL IN STOCK.

FOR SALE IN ANY SIZE WEIGHT OR LENGTH



STRUCTURAL STEEL FOR NINE STORY BUILDING, FEDERAL LIFE ASSURANCE CO., HAMILTON, MANUFACTURED AND ERECTED BY US.

15,000
TONS ANNUAL CAPACITY

NO TROUBLE TO SEND YOU PLANS AND ESTIMATES

The Hamilton Bridge Works Company, Ltd.

HAMILTON, CANADA

JAMES PENDER & COMPANY, LTD.

Makers of

Wire in Coils and Cut Lengths (including Rods from $\frac{3}{16}$ to $\frac{3}{8}$ round) for Baling Hay, Pulp, &c. Having the best Wire Straightening Machine in Canada, can furnish a first-class article at a moderate price.

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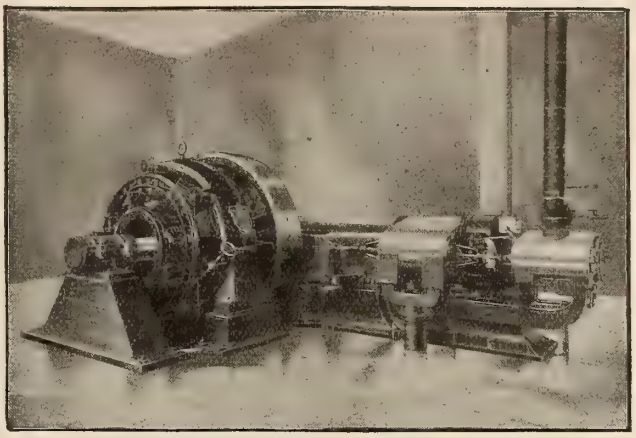
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Steel Rails

OF HIGHEST QUALITY

Your Specification will have our best attention

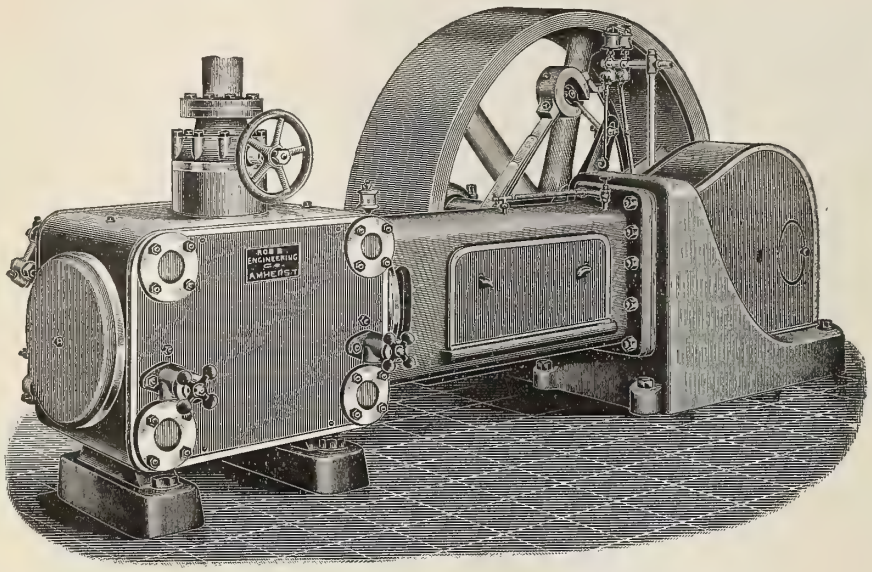
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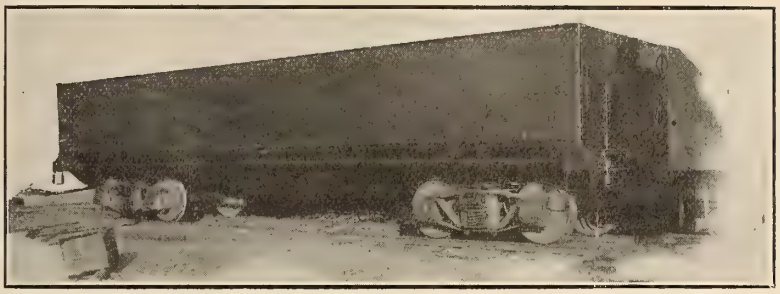
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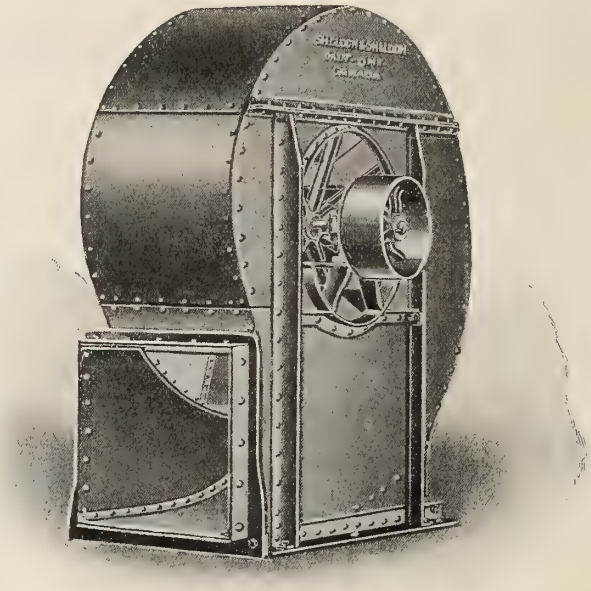
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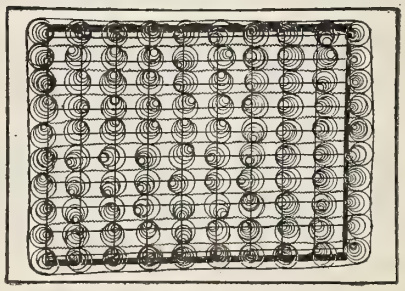
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NOISELESS
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EVERLASTING

A great deal of advertising appears in the Magazines *re* the comfort and wearing quality of various Mattresses, but it is safe to say that a hard or saggy spring will destroy all the good points of even an Ostermoor Mattress.

We guarantee that only the best quality of tempered wire is used in the **BANNER** Spring, and that every individual Spring is tested before and after oil tempering, and will therefore LAST A LIFETIME.

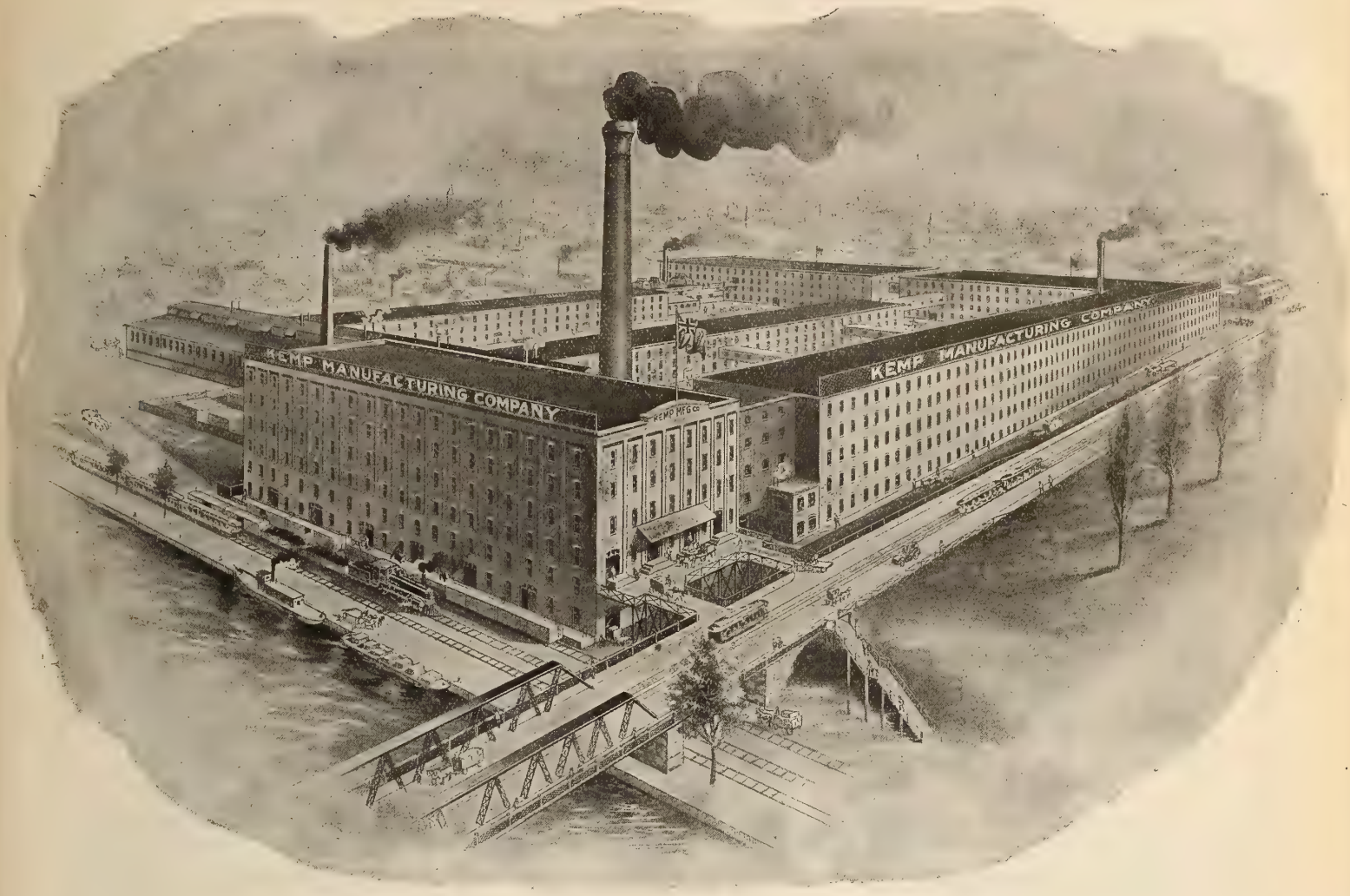
A feature not shown in the cut is that the **BANNER** Spring will fold in two, making it much easier to handle, even up a narrow stairway.

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ENDORSED BY SCIENTISTS

Extract of the report of the inspection of the abattoirs of Winnipeg by the Provincial Board of Health, dated 20th July, 1906.

"SUBSEQUENT to the inspection of the establishments here nbefore mentioned, the Factory of the Manitoba Canning Co., located on the open prairie about ten miles south-east from Winnipeg, was visited. This establishment has been in operation for about three years, and is under the management of a gentleman who received his training in France. The business embraces the canning of corned beef, roast beef, tongue, turkey, chicken, game and other specialties. At the time of visit the factory was not working, owing to improvements being made involving an expenditure, it was stated, of $25,000.00, consisting of new buildings and the installation of new and modern machinery and appliances. The premises were found to be clean and well kept, and all the floors where the products enter during the course of manufacture are of concrete with adequate drainage facilities. Samples of all the products were taken and have been carefully examined and found to be in good condition and of excellent quality. . . . . "

(Signed) R. M. SIMPSON.
Chairman, Provincial Board of Health.

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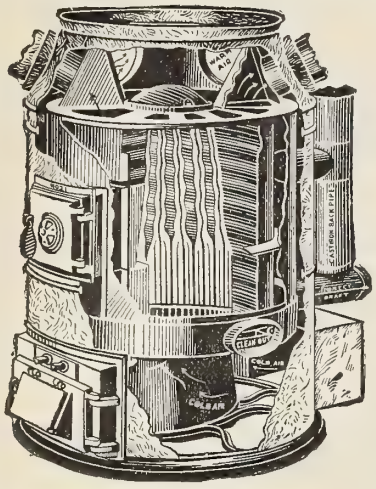
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FOR HOME, CHURCH, SCHOOL

THE KELSEY is unlike any other warming and ventilating device, as to both construction and operation, consequently **not in the hot air furnace class.**

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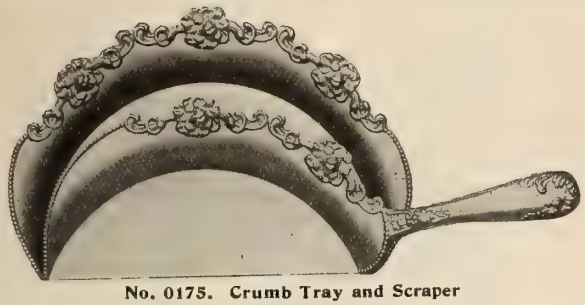
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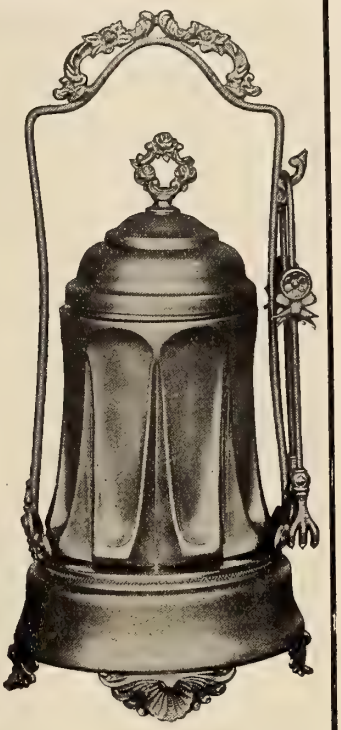
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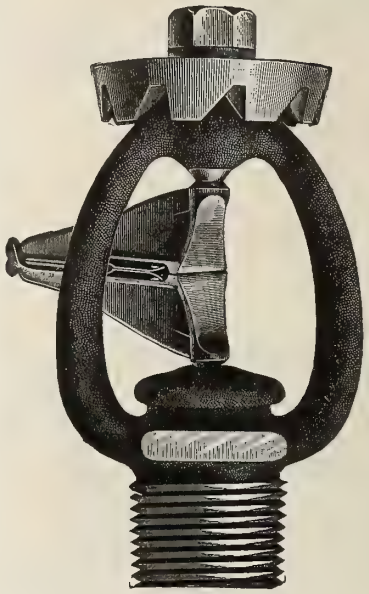
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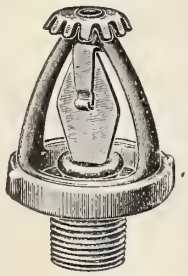

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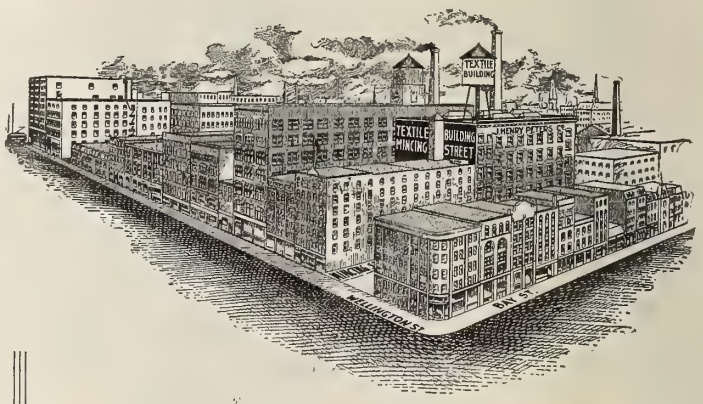
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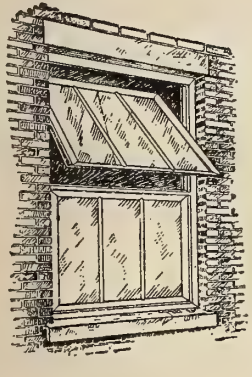
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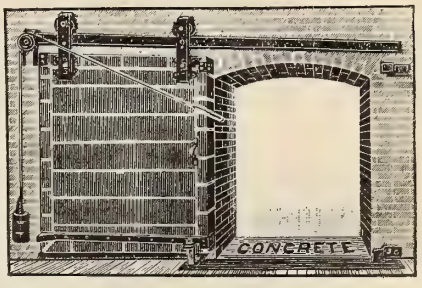
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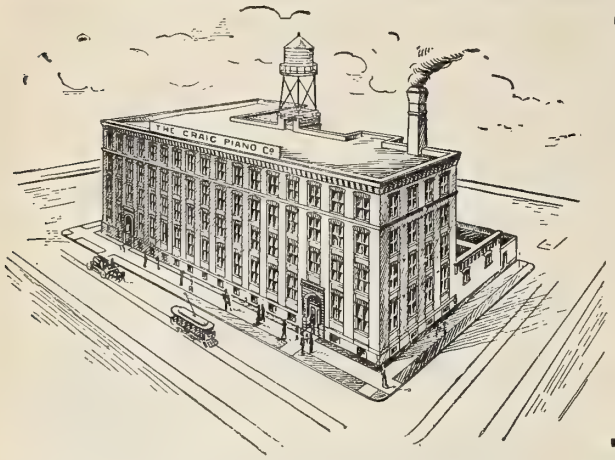
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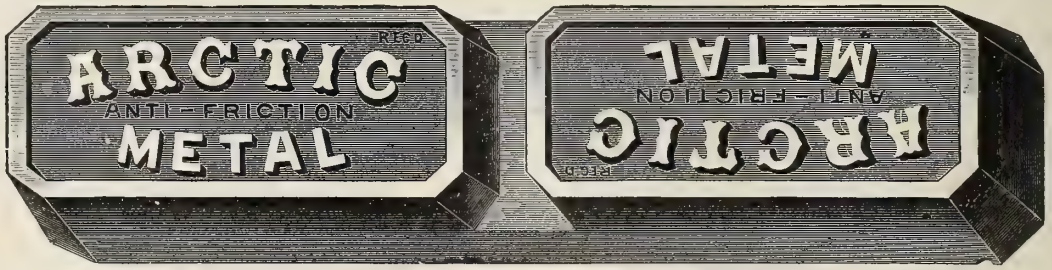
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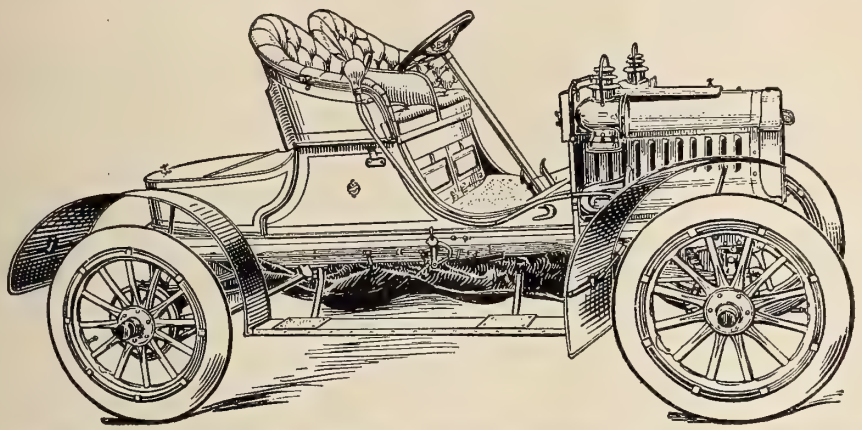
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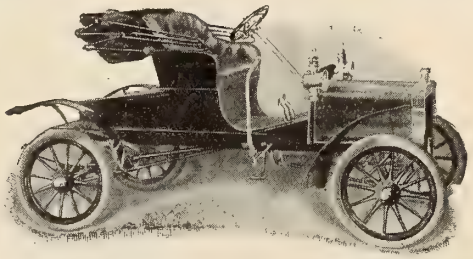
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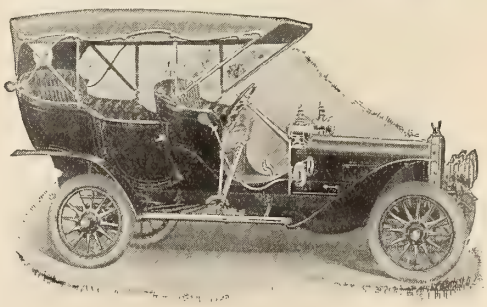
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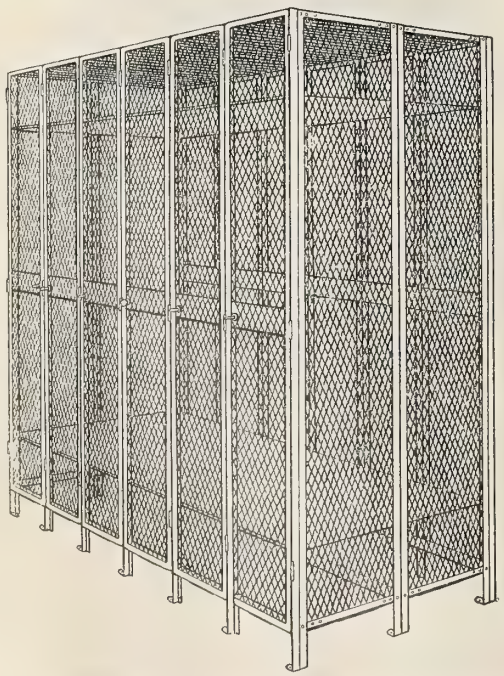
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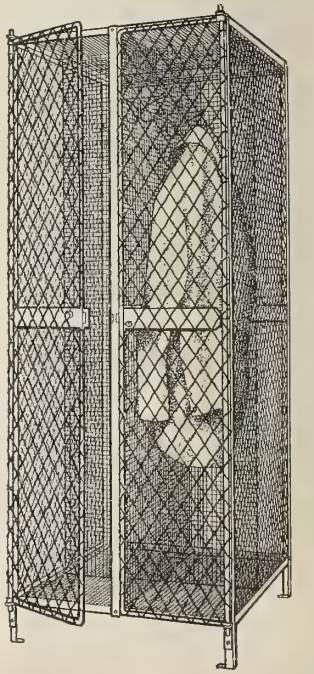
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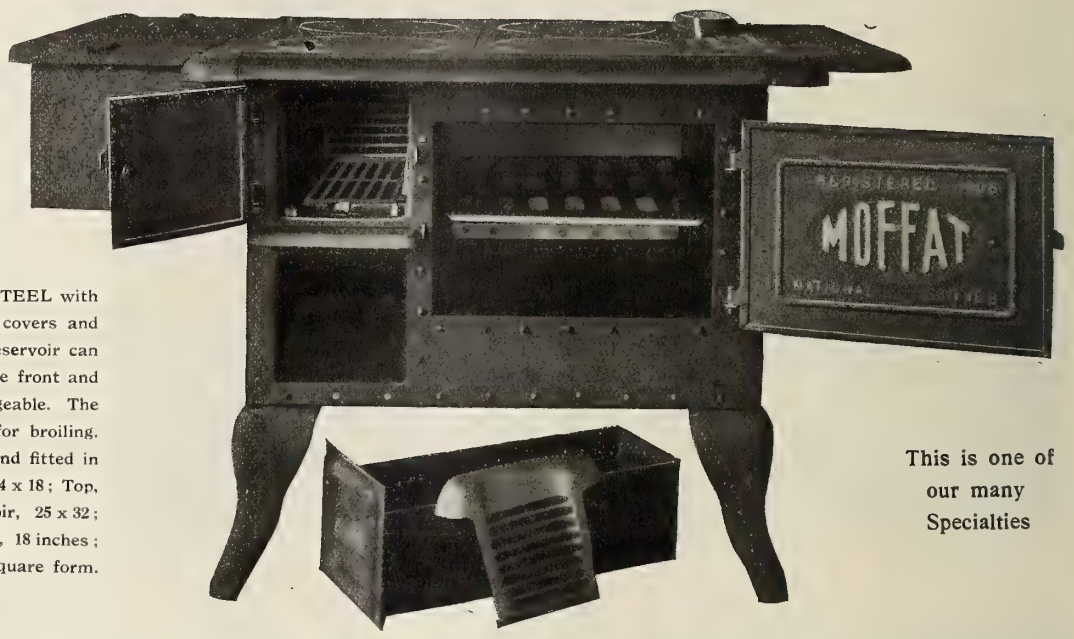
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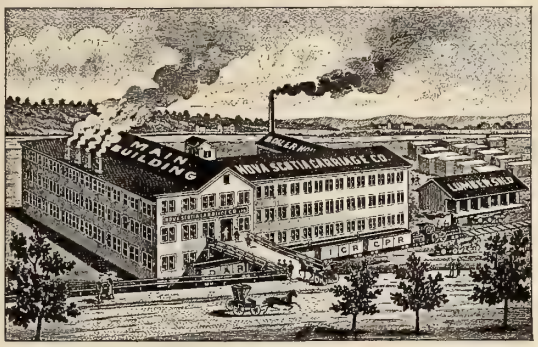
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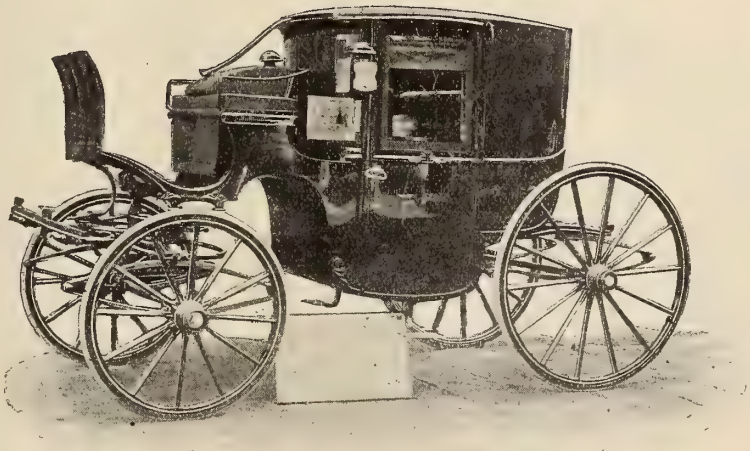
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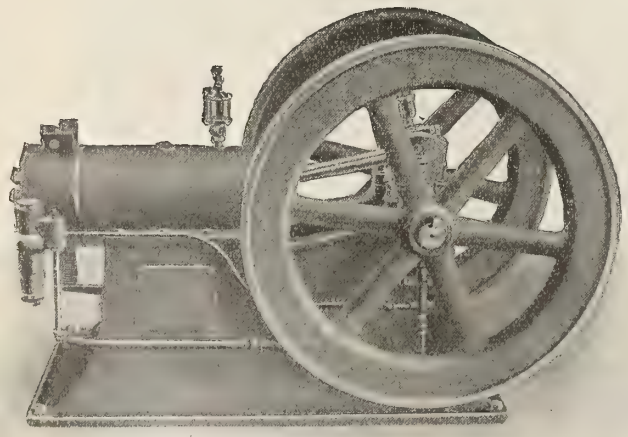
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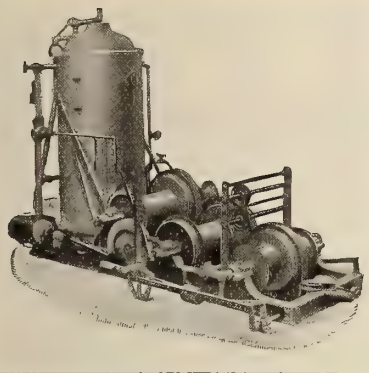
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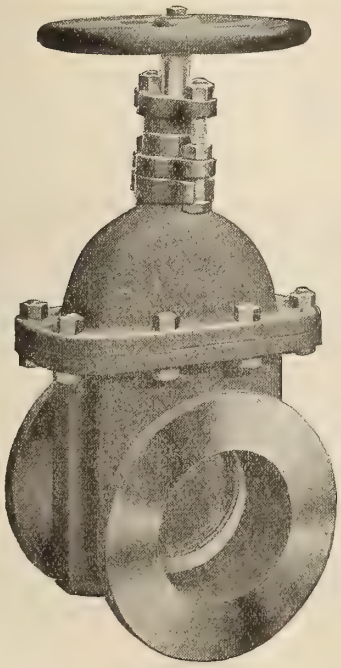
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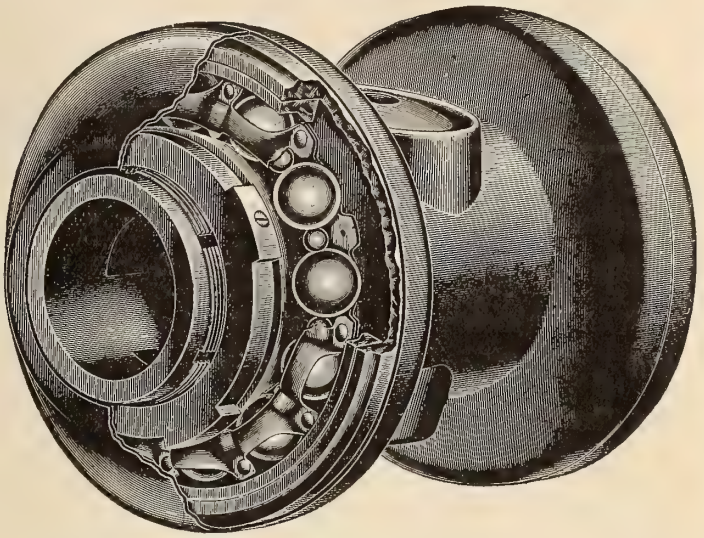
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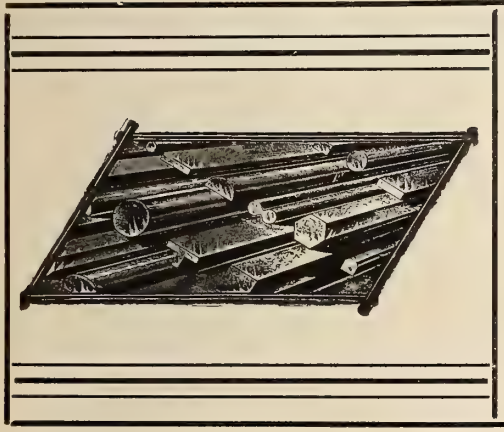
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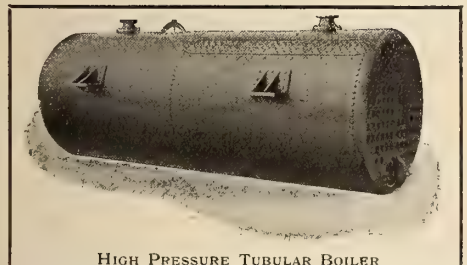
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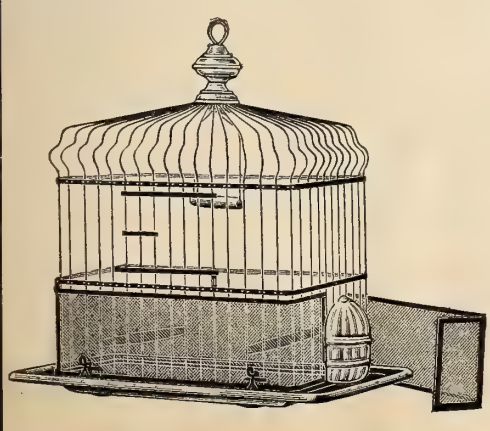
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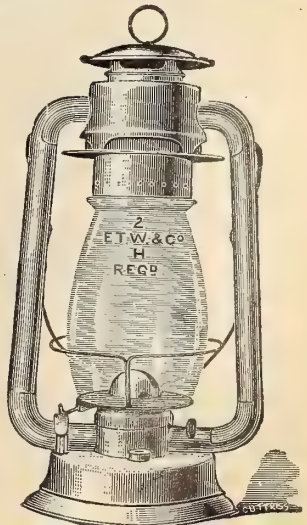


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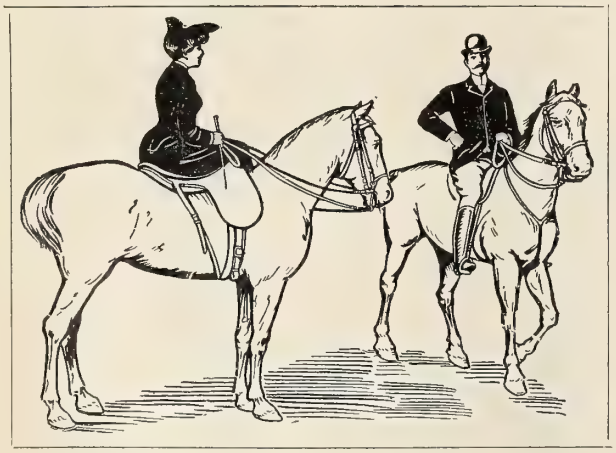
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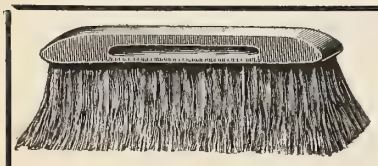
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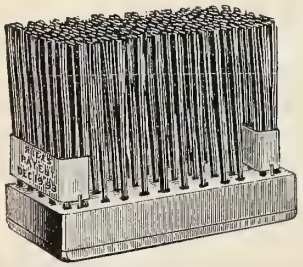
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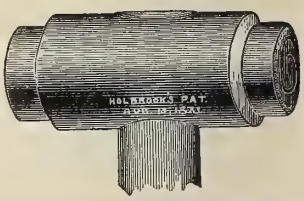


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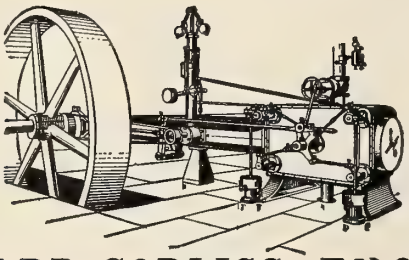
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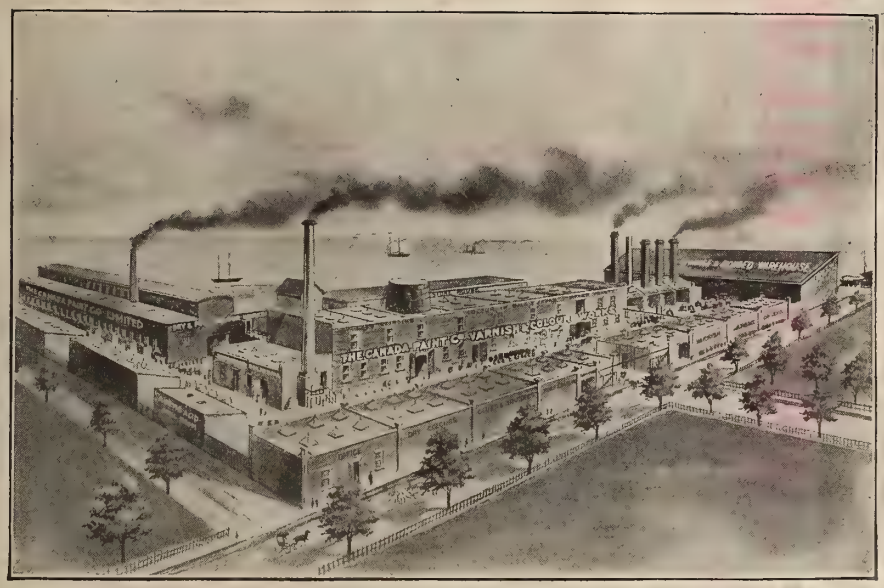
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Vol. VII. No. 4 NOVEMBER, 1906 $1.00 per year

INDUSTRIAL CANADA

J C Hopkins
83 Church st



BIRD'S EYE VIEW OF
THE CANADA PAINT COMPANY'S VARNISH FACTORY, TORONTO

PUBLISHED MONTHLY *by* *The* CANADIAN MANUFACTURERS ASSOCIATION, *Incorporated.*

HEAD OFFICE, TORONTO.
BRANCH OFFICES, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, HALIFAX, QUEBEC.

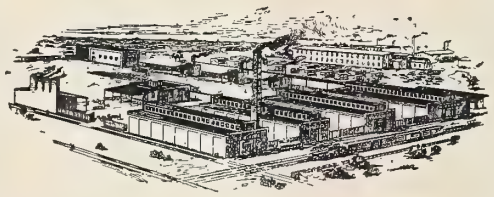
TO THE VARNISH BUYER

the most serious considerations are **quality, reliability** and **uniformity,** and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

Write for 100 page Illustrated Catalogue. **Every dealer should have a Copy for Reference**

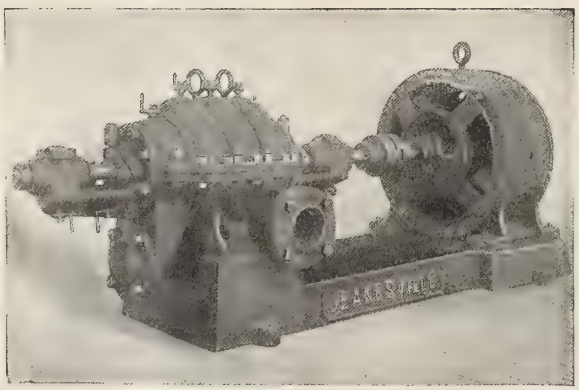


BERRY BROTHERS, LIMITED

VARNISH MANUFACTURERS

WALKERVILLE, - - - ONT.

Quality Always Counts
Westinghouse Type S Motors



no matter where or how applied
their quality is always in evidence

There Are Reasons Why:

Rigid construction. — Heavy shafts. — Bearings split, interchangeable and self-oiling, with two oil rings to each bearing.—Shunted brush-holders, and perfect brush-holder adjustment.

Canadian Westinghouse Co., Limited.

General Office and Works: HAMILTON, ONT.

For particulars address nearest office

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Toronto

152 Hastings Street
Vancouver

Hamilton

922-923 Union Bank Bldg.
Winnipeg

Sovereign Bank of Canada Bldg.
Montreal

134 Granville Street
Halifax

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Bank and Commercial Stationers,
Manufacturers of High-Class Calendars
and Advertising Novelties

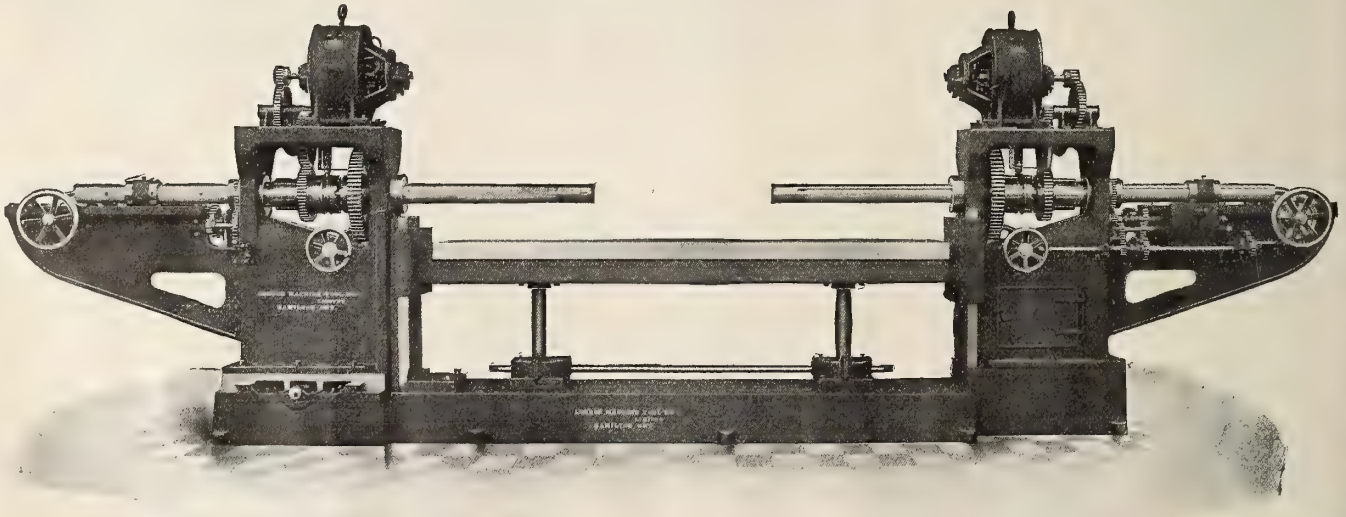
THE DAVID SMITH ENGRAVING & LITHO. CO.

(FORMERLY OF ROLPH, SMITH & CO.)

56-60 CHURCH STREET, - - - TORONTO.

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HEAVY DOUBLE END BORING MILL

Designed for the accurate boring of Railway Motor Bearings

LONDON MACHINE TOOL CO., Ltd., HAMILTON, CANADA

Sales Office : TRADERS BANK BUILDING, TORONTO, CAN.

Sheet Metal Building Materials

WE HAVE LARGE STOCKS
CAN GIVE PROMPT SHIPMENT

Carefully attend to details. Shall be pleased to have your enquiries and orders. Reliable goods only—no cheap trash made. 21 years experience.

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METALLIC WINDOWS (Wired Glass)
METALLIC EAVE TROUGH
METALLIC CONDUCTOR PIPE
METALLIC SKYLIGHTS
METALLIC VENTILATORS
METALLIC CORNICES
CORRUGATED IRON (Straight and Curved)

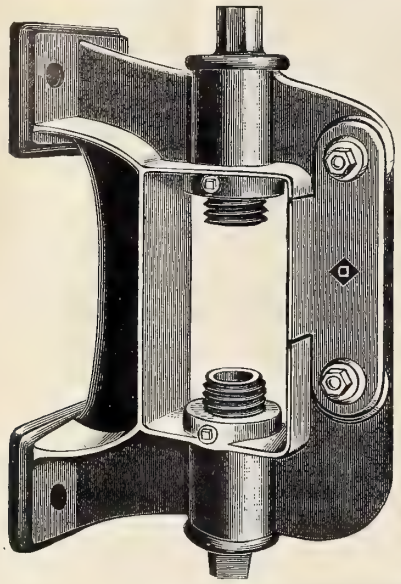
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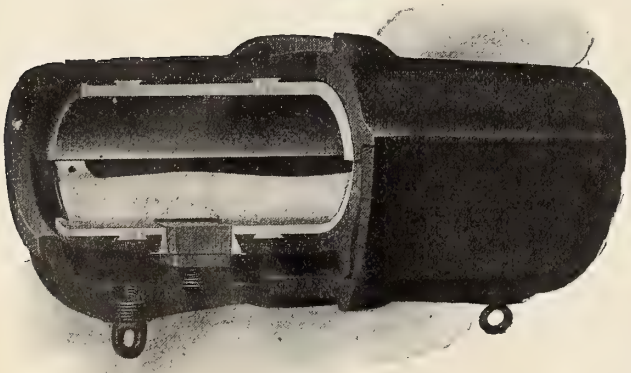
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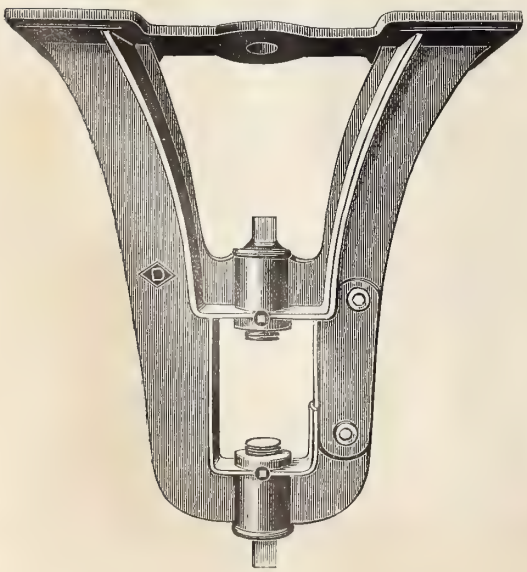
TORONTO - - AND - - WINNIPEG

DODGE

POWER TRANSMISSION MACHINERY







Our Machine Moulded Ball and Socket Post Hanger

Double Brace and with Machine cut adjusting screws. Distinctly high grade! Comparison with any other make is invited.

Our "Capillary" Self Oiling Hanger Bearing

The most simple and most effective Self Oiling Bearing on the market!
A practical application of a Natural Law! Thousands in use. All well liked. Successful!

"DODGE"

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Note that this is an **"Open-side"** Hanger "closed" with our Double Brace Link, which draws up on cup and cone feature. Do not confuse this quality with the "competition" open bottom Hanger, it is not in that class at all!

Biggest stocks in Canada for quick shipment.

ALL MADE IN CANADA BY

DODGE MANUFACTURING CO.

TORONTO MONTREAL

The Office Clock Story



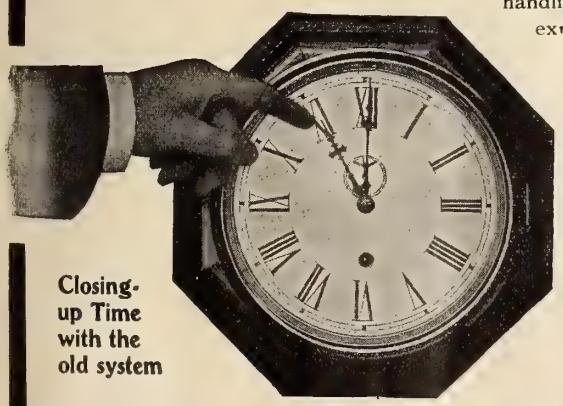
Closing-up Time with The Copeland-Chatterson System

IT'S the office clock that can tell the story—knows just how many tiresome hours are spent at night over the books in a vain endeavor to get them up to date; or can tell of a cheerful staff leaving on the hour with all work completed.

What story will your office clock tell?

A Copeland-Chatterson System will adjust the hands of the office clock; will make closing up time right, and will enable you to say just how your business is progressing or to find quickly the record you require and despatch promptly your customers' accounts.

It doesn't matter whether it's wholesale, manufacturing, retail, financial or a professional business, we have systems for any one of them that will simplify and make methodical the accounting—facilitating the general work of handling business details. Write us to-day—one of our experts is somewhere near you, and he knows the systematizing business down to the ground.



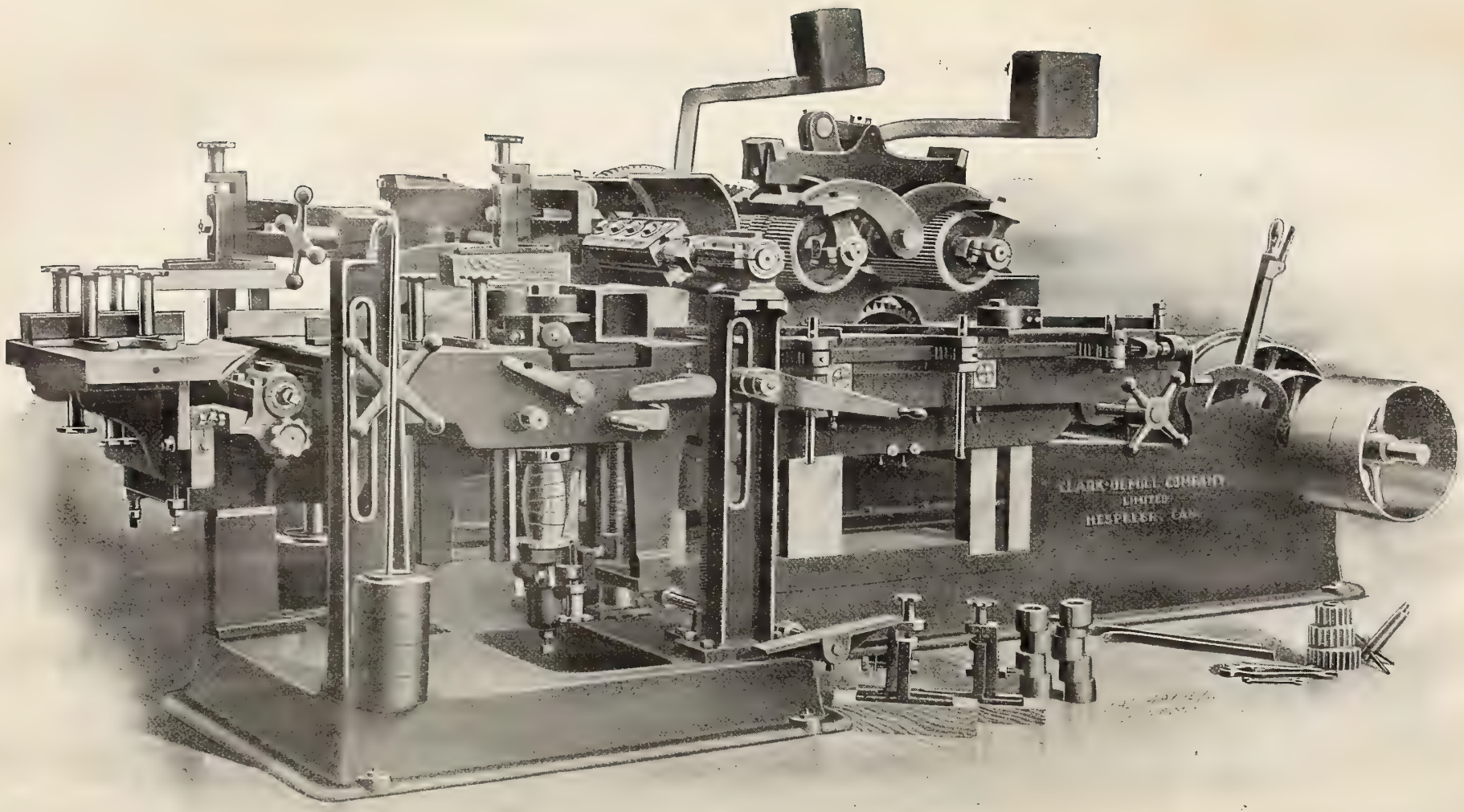
Closing-up Time with the old system

The Copeland-Chatterson Co. Ltd.

Devisers and Manufacturers of Systems for Business

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Winnipeg	141 Bannantyne Ave. East
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London, Eng.	43 Cannon St. E.C.
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Extra Heavy Moulder, on Base

Planes 10 inches, 12 inches and 13 inches wide, by 12 inches thick.
Has eight changes of feed, 11, 15, 19, 22, 25, 34, 42 and 50 running ft. per minute.

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Western Representatives for Manitoba, Saskatchewan and Alberta, THE WATEROUS ENGINE WORKS CO., Ltd., of Winnipeg, Manitoba

CLARK - DEMILL COMPANY

LIMITED

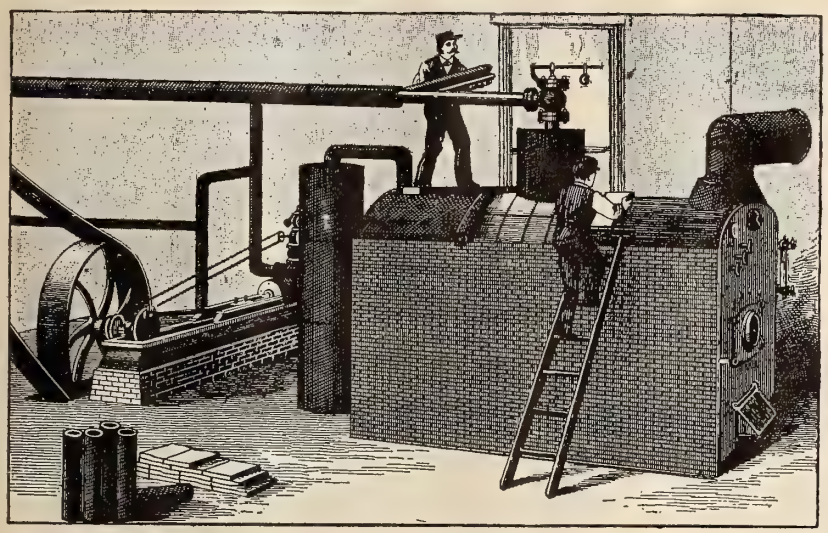
SUCCESSORS TO CLARK & DEMILL, GALT, CANADA

Manufacturers High Grade Wood-Working Machinery

HESPELER = ONTARIO = CANADA

Are Your Steam Pipes Insulated?

If NOT You are BURNING MONEY



A GOOD Covering

Pays for itself in one season, and is a revenue producer indefinitely

The Best is Cheapest

WE HAVE IT

We are the Largest Manufacturers in Canada of

PIPE AND BOILER COVERINGS, ASBESTOS CEMENTS, ETC.

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PAROID and other **ROOFINGS**

Insulating Papers and Materials .

ENGINE
SHEET
GASKET } PACKINGS

ASBESTOS Paper, Mill-Board and Rolled Board, Rope, Wick and Twine

SOLE CANADIAN AGENTS FOR

Viscos for Belts = Ferrubron Metal Paint

EUREKA MINERAL WOOL & ASBESTOS CO.

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FREYSENG CORK CO.

LIMITED

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MACHINE CUT **CORKS** HAND CUT

Corking Machines. Capsule Machines.
Bottle Capsules. Bottle Baskets. Bottling Wire.
Sealing Wax. Tin Foil---Plain and Colored.
Cork Life Preservers and Ring Buoys.

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QUEBEC, P.Q. OTTAWA, ONT. HALIFAX, N.S.

THE E.B.EDDY WARES

HERE SINCE 1851

Counting



House

THE E. B. EDDY COMPANY

LIMITED

HULL :: CANADA

Branches and Agencies at Montreal, Toronto, Halifax, Quebec, Ottawa, Hamilton, London, Kingston, Brockville, St. John, N.B., Winnipeg, Victoria, Vancouver, Calgary, Edmonton.

MANUFACTURERS OF AND WHOLESALE DEALERS IN

MATCHES, PAPERS, PAPER BAGS, WOODENWARE, FIBREWARE, WASHBOARDS, &c.

We wish to direct special attention to the pink tipped

"SILENT"

PARLOR MATCH

Our latest production in this line. Being **perfectly noiseless** and **absolutely safe** and **sure,** its excellent points are at once apparent.

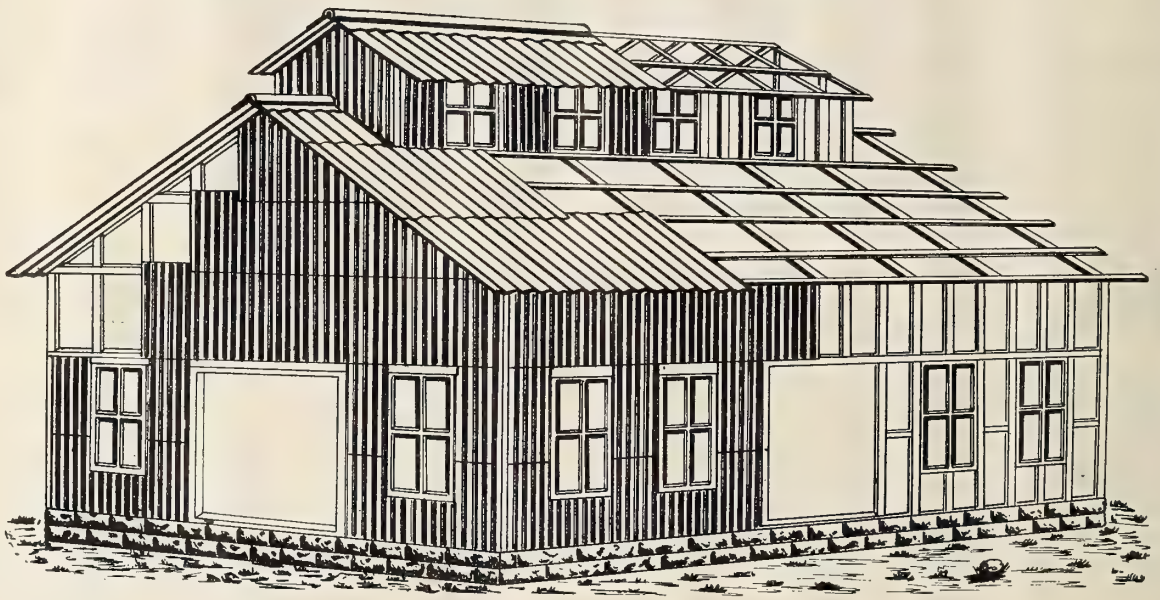
ASK YOUR GROCER FOR A BOX.

This, as well as all our other well known brands are for sale by first-class Dealers everywhere.

ALWAYS, EVERYWHERE IN CANADA, ASK FOR EDDY'S MATCHES

CORRUGATED IRON

"Keeping Everlastingly at it Brings Success"



PEDLAR'S CORRUGATED IRON is made on a **38,000 lb. Press** (the only one in Canada), one corrugation at a time, and is guaranteed true and straight to size.

We carry a **600 TON STOCK** in **OSHAWA, MONTREAL, TORONTO, OTTAWA and LONDON,** and can ship ordinary requirements same day as order is received.

Made in 1 in., 2 in., or 2¾ in. Corrugation in sheets any length up to 10 feet, in 28—26—24—22—20—18 gauge, both painted or galvanized. This class of material is most suitable for fireproofing **BARNS, FACTORY, MILL,** and **WAREHOUSE BUILDINGS,** and is water and wind proof. Corrugated Ridges, Lead Washers, and Galvanized Nails carried in Stock.

Send Specification to your nearest office for Catalogues and Prices.

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767 Craig St.	423 Sussex St.	11 Colborne St.	69 Dundas St.	76 Lombard St.	615 Pender St.

Write your nearest Office—**HEAD OFFICE AND WORKS, OSHAWA, ONT.**

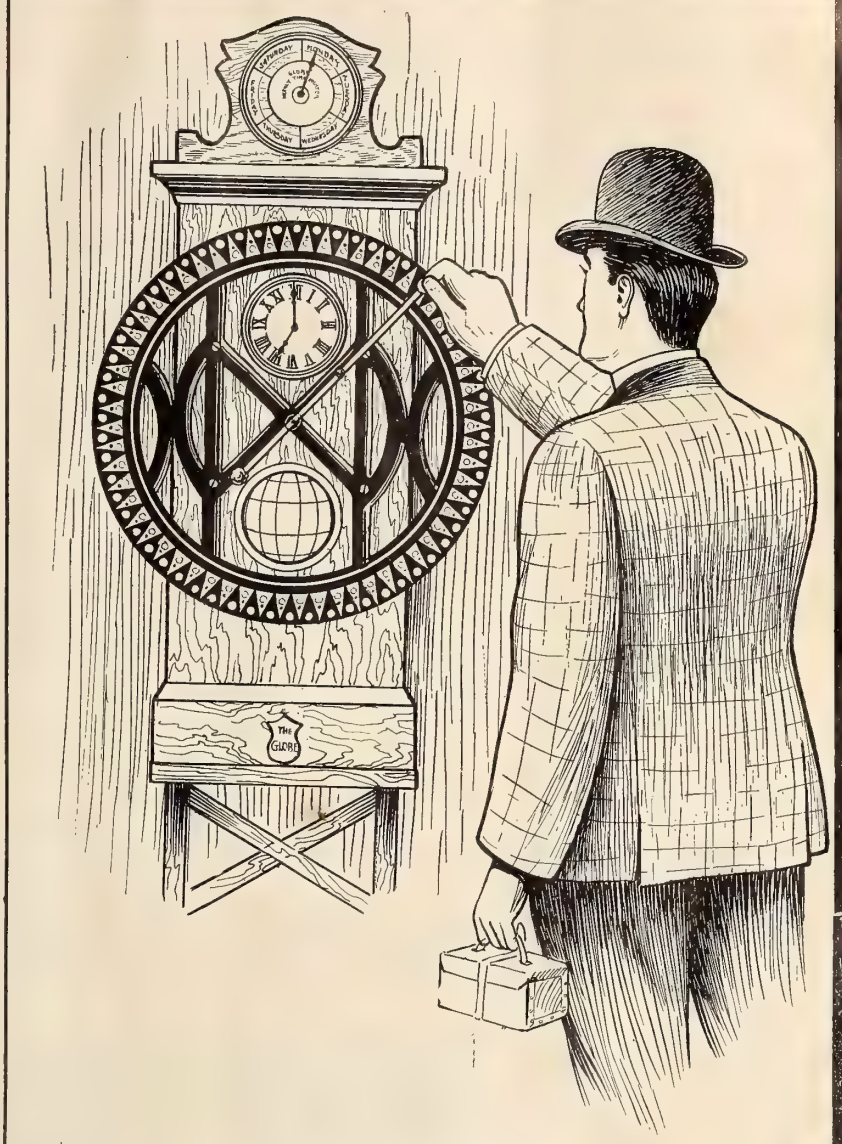
Largest Makers of Sheet Metal Building Material under the British Flag

THE 'GLOBE'

"Shews no Partiality"

Automatic Weekly Model

A clock that requires no attention whatever during the week. At the **beginning of the week** the sheet is put on by the time keeper—the clock **changes** being performed **automatically.** At the **end of the week,** sheet is removed, totals inserted and men paid for **actual time.**



"MADE IN CANADA"

All the time of your employees being on one sheet it simplifies the work of the time keeper down to the finest possible point. It will pay you to investigate.

Four Sizes, for 50, 100, 150 and 200 Employees

Makers of the "UNISYSTEM" Brand of Loose Leaf Ledgers and Special Purpose Binders

UNIVERSAL SYSTEMS,

LIMITED

8-10 ADELAIDE STREET WEST

TORONTO, - - CANADA

OFFICES, TORONTO AND MONTREAL

If a Poll were taken on the question

What is the name of the leading .. Newspaper in Canada ?

There would be practical unanimity.

That Paper should be an advertising medium Par Excellence ..

TORONTO, CANADA.

THE
Standard Ideal Sanitary Co., Limited

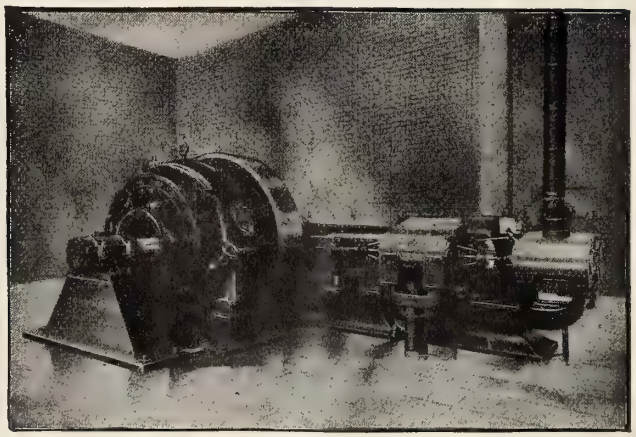
Manufacturers of
Cast Iron, Porcelain Enamelled

Bath Tubs,
Lavatories,
Sinks, Urinals,
Etc., Etc.

Our NEW CATALOGUE is now ready and will be mailed on request.

Factories and Head Office
PORT HOPE, ONTARIO, CANADA.

SIDE CRANK IDEAL ENGINES



Specially adapted for Direct Connection. Perfection in High Speed Engine Design. Send for Bulletin No. 6.

THE GOLDIE & McCULLOCH CO., LIMITED
GALT, - - ONTARIO, - - CANADA
Western Branch: 248 McDERMOTT AVENUE, WINNIPEG, MAN.
QUEBEC AGENTS—ROSS & GREIG, MONTREAL, QUE.

WE MAKE Wheelock Engines, Corliss Engines, Ideal High Speed Engines, Boilers, Steam and Power Pumps, Flour Mill Machinery, Oatmeal Mill Machinery, Gyrators, Emery Choppers, Wood Working Machinery, Shingle Machinery, Heading and Stave Machinery, Wood Rim Split Pulleys, Iron Pulleys, Shafting, Hangers, Friction Clutch Couplings, Friction Clutch Pulleys, Safes, Vaults and Vault Doors. **Send for Catalogue and Prices.**

Industrial Canada.

ISSUED BY

The Canadian Manufacturers' Association,

Incorporated.

"There be three things which make a nation great and prosperous: A fertile soil, busy workshops, and easy conveyance for man and goods from place to place."—Bacon.

Vol. VII. TORONTO, NOVEMBER, 1906. No. 4.

INDUSTRIAL CANADA

Issued monthly as the the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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Editor: F. P. MEGAN.
Advertising Manager: B. L. ANDERSON.

"A PRECARIOUS POSITION."

THE "Weekly Sun," whose chief aim is to bring about free trade between Canada and the United States, declares that Canada is at present in a "precarious position," owing to our dependence on the British market. In a recent article it says:—

"Should the cotton industry in England be tied up by a prolonged strike or British iron workers paralyzed with a lockout, we would have a repetition here of conditions such as prevailed in 1896, when cheese sold at half the price now ruling. And either of these things may happen at any moment."

The remedy, according to the "Weekly Sun," is reciprocity with the United States. But strikes and lockouts may occur in the United States as well as in England, and, what is more, a reciprocity arrangement with the United States might be brought to a sudden termination, which, if Canada were dependent upon the United States market, would cause far more disturbance of Canadian trade than a strike or lockout. In fact, under such conditions Canada would be absolutely at the mercy of the United States Congress. Canadian dependence on the United States for a market would have every disadvantage attending dependence on the British market, and the additional disadvantage that the United States is a foreign country, whose politicians might at any time consider it good politics to show hostility to Canada, just as Mr. Cleveland unexpectedly did when he was President, whereas whichever party is in power in Britain we may be sure that the attitude toward the colonies will at least be friendly. The true policy of Canada is to so develop Canadian industries that the home demand will so far exceed the British demand that a strike or lockout in Britain will not paralyze Canadian trade. At the same time it is well to cultivate British trade so far as possible, and endeavor to bring about a reciprocal Imperial preferential trade arrangement, which would be far more enduring than any arrangement made with the United States. The leaders of both political parties in Canada have arrived at the conclusion that the British market is worth more to Canada than the United States market, and they are beginning to realize that the Canadian home market is worth more than the British market and the United States market combined.

CHEAP LABOR AND INDUSTRIAL DEVELOPMENT.

MR. BYRON E. WALKER in his speech before the Canadian Club of Vancouver, supplied the spark that was to stir up the smoldering fires of the Chinese labor question. His observations are the result of yearly visits to the West, during which he is given exceptional opportunities for seeing the needs of the country. He said in part:—

"I do not believe that British Columbia can enter into its inheritance till it reaches a proper solution of the labor question. More than any other part of Canada this Province needs a plentiful supply of cheap labor. What I mean by cheap labor is the men who are willing to do an honest day's work for the lowest wage. The kind of cheap labor imperatively needed is the least skilled kind. I am told that hundreds of thousands of dollars' worth of fruit was allowed to rot in this Province this year because there was no labor to gather it."

It will not be denied by anybody, least of all by Mr. Walker, that the presence of Chinese is in many respects objectionable. Their inferior civilization, their different manner of life, and the lack of all sympathy between the East and the West are too manifest to be overlooked. But, after all, most things are desirable or undesirable relatively. The very civilization which we boast is the result of admitting many restraints and restrictions on the individual for the general good. So the Chinese labor question has two sides, and the side which is usually turned from view

is that now revealed by Mr. Walker. Not that he mentions the Chinese, but cheap labor and Chinese labor are convertible terms in British Columbia.

Now that the subject has been opened up again it will be well to clear away any misunderstandings or prejudices which may be in the minds of the public by which their judgments may be biased. It is a question upon which much can be said pro and con, but let the discussion be on the actual merits of the case, and not upon prejudices which have no justification in fact.

Citizens of Eastern Canada are accustomed to look with great disfavor on the Chinaman. Yet on the coast he does a man's work. In the lumber camps, where heavy work is to be done, he finds employment. In the canneries, where for a brief period speed and endurance are essential, he alone is employed. Then as cooks and house servants the Chinese are preferred to whites, being distinguished by their cleanliness, skill and docility. These instances are enough to remove any idea of gross inferiority which may prevail. They have amply proven that they can do the work which is required for the development of the Province if they are permitted to do so.

That such work is needed is generally admitted. The Province is seriously handicapped by lack of labor. Immigrants come either from the East or the West. Coming from the East, they must pass through the eastern Provinces, where the manufacturers, farmers, and railroad builders are crying out for help. Those who pass them are absorbed by the limitless agricultural lands of the Middle West. Only the stray immigrant finds his way through to the coast. Consequently for many years there has been a great lack of laborers, and the natural resources of the Province have remained undeveloped.

The importance of industrial activity in British Columbia appeals to all Canada. To the East it is important that there be return freight for the trains carrying goods West. For the West it is essential that goods be produced to exchange for what must be imported. The whole country must profit from the wealth which is lying dormant in the mines and forests. For years the great mineral resources have been left almost untouched on account of the constant trouble caused by union workmen. The lumbering camps cannot hold the white men, who prefer to try their luck in the mining districts. Without the Chinese the immense salmon canning industry would be non-existent. Now we have the report of Mr. Walker that the fruit crop has been wasted through lack of hands to pick it. Surely these considerations call for some action. With white labor at its present cost goods cannot be manufactured and sold in the East, where the bulk of the market still is. Are the industries—mining, fishing, lumbering and fruit-growing—to be developed, or is cheap labor to be excluded?

SENATOR McMULLEN AND JAMES McEWING.

A CONTROVERSY has recently been going on in the press between Senator McMullen and James McEwing, one of the leaders of the free trade organization known as the Farmers' Association. Mr. McEwing believes that all the farmers are free traders. Senator McMullen thinks the majority of them are protectionists. Mr. McEwing devotes the greater part of his articles to a bitter personal attack on Senator McMullen. Mr. McEwing remembers that Senator McMullen was formerly a free trader like himself, and the change of view arouses his resentment. But Senator McMullen is only one of many Liberals who have changed their minds on this question during the past ten years. It is, we believe, no exaggeration to say that at least one in every three Liberals has become a protectionist by conviction. Consider what effect this change of views among Liberals would have upon an election in case the Laurier Government should listen to the advice of Mr. James McEwing and his associates regarding the revision of the tariff. It must be remembered that the Liberal leaders did at one time listen to the advice of the commercial union group who controlled "The Farmers' Association," and they never won a single election while fighting under that banner. At that time their forces were united, and nearly every Canadian Liberal was opposed to the principle of protection. Now, the party is certainly divided in opinion on that question. The change of opinion is even more general among the young men of the party than among the old leaders like Senator McMullen.

As to the question whether the majority of farmers are protectionists or not, it would probably be difficult to prove positively which side has the majority, but there is no doubt that a great many farmers now recognize clearly the absolute necessity of protection; and it should be noted that in almost every rural constituency to-day there are small manufacturing towns and villages which hold the balance of power. If the Liberal party adopted the advice of Mr. James McEwing these manufacturing towns, whose very existence depends upon the maintenance of their industries, would go almost solidly against the Government. However, there does not seem to be the slightest danger that the Laurier Government will be so foolish as to accept the advice of the leaders of the Farmers' Association. They know that its membership is not large, and that it does not really represent the Canadian farming community.

PROVINCIALISM IN TAXATION.

IN spite of representations by Boards of Trade, the Canadian Manufacturers' Association and other commercial bodies, the objectionable provincial taxes on commercial travellers still remain in force. The Provinces which impose these vexatious taxes have uniformly refused to submit to the urgent appeals of the business interests for their nullification. For a paltry few thousand dollars of revenue they are ready to set loose the disintegrating influences which such legislation begets. British Columbia and Prince Edward Island continue to put up a barrier against their sister Provinces, whereby the trade of the country is seriously affected, and Quebec, while it does not tax representatives of Canadian houses, discriminates against British and foreign travelers.

That individual Provinces should resort to such a narrow policy to raise revenue is surprising; the whole tendency of recent years has been so strong in the other direction. A Canadian sentiment broad as the country itself has been the outstanding growth of the past decade. Our outlook has been widening. Increased transportation facilities, with continuous settlement, have brought the various parts of our country closer together. We have intercourse with the people of every Province, and mutual business is transacted. The Made-in-Canada idea has been propagated extensively.

But the result will be barren if one section discourages by arbitrary taxes the trade between citizen and citizen. The whole work of years past will be undone if such goes on. We have striven to forget as far as possible the boundary lines between Province and Province. Canadian prosperity and Canadian development have been our aim.

When the subject was up for discussion some months ago the Dominion Government refused to interfere on the

grounds that such legislation was within the right of the Provinces. The sooner this condition is rectified the better. All matters relating to trade should be directly under the control of the Federal authorities. Our commerce has got beyond the township stage; it has become national.

STRENGTH OF OUR BANKING SYSTEM.

RECENT troubles have served to bring the general strength of our banking institutions forcibly before the public. It is satisfactory to know that in spite of the unfortunate revelations in connection with the Ontario Bank suspension, the system in force in Canada has been shown to be capable of meeting even extraordinary conditions. The branch bank system lends itself admirably to the fluctuating industrial conditions of an extended country. In Canada to-day we have the East fairly well settled and the people working in a definite sphere. Hence, the tendency is to put money in the banks—to accumulate wealth. In the West, on the contrary, the farmers are harvesting their immense crops, and are developing their lands, buying new machinery, etc. The banks are called on for heavy drafts during the few months following the gathering of the harvest. So the supply and demand is balanced. The banks are in a sense self-contained. Much of the borrowing and lending which under another system would go on between bank and bank, consists under our system merely in the transference of money from one branch to another. Thus, a bank has not to depend on other institutions in order to meet periodical drains on its resources, such as the handling of the Western crops each year entails. It can plan in advance for such emergencies.

Moreover, under the branch system towns have banking facilities where it would otherwise be impossible to support a bank. The deposits in many places do not of themselves justify the maintenance of a bank; it is only by using the deposits of other branches to meet the calls for credit that the bank is possible. Hence, both for strength and convenience to the public we may congratulate ourselves on our banking institutions.

The general public seem to be amply protected against any possible loss. The deposits with the Government guarantee the redemption of the note issue. The compulsory reserve fund and the double liability clause of the Bank Act provide against any loss on the part of depositors. The shareholders are the body most likely to suffer, and the remedy for them rests largely in their own hands. Their salvation lies in electing directors who will direct, and in having adequate inspection by accountants who will report to them alone. These are provisions which may well be left to the shareholders themselves. If the Government provides adequate protection for the general depositors, the internal economy may fairly be left to the shareholders, as is the case in other businesses.

THE WORLD'S RICHEST BUYERS.

THE "Weekly Sun," which continually endeavors to persuade its readers that Canadian manufacturers are of no benefit to our farmers, that protection is ruinous to tillers of the soil, and that the tariff does not add one cent to the price of anything the farmer has to sell, while it increases the price of everything he has to buy, recently published two editorials, in which it argued that the two best farmers' markets in the world are the United States and Germany. The first of these articles was published in the "Weekly Sun" of October 24th under the heading, "The World's Richest Buyers are at Our Doors." This article begins with the statement that Canadians are not as well informed as they should be about the phenomenal development of wealth that has taken place in the United States during the last few years. It goes on to say that between 1880 and 1900 the value of the output of manufactured products increased from five and one-quarter to thirteen billion dollars; the production of coal increased from 64,000,000 tons in 1880 to 314,000,000 in 1904; the production of pig iron jumped from less than four million tons to sixteen and one-half million tons in the same period, and that similar increases took place in all lines of manufacture, while the amount of money in circulation per head of population has more than doubled. The effect of this development of manufactures in the United States according to the "Weekly Sun," has been to create a most profitable home market. It says:—

"At one time the United States followed the same practice that Canada follows now—shipped the best of its butter, cheese and cattle to the British market. The United States does this no longer. The choicest creamery is retained at home. The first quality of cattle are slaughtered for local use, the second grade going for export. Why? Because the United States home market will pay a higher price for the best than can be obtained anywhere else in the world."

The lesson which the "Weekly Sun" draws from this is that Canadians should endeavor to get the tariff barriers which separate us from the United States removed in order that Canadian farmers may get the benefit of that rich market. But every Canadian Government since the Dominion was established has tried to secure reciprocity with the United States and failed. If any Government should succeed in arranging for reciprocity it might be ended by short notice by caprice of the American people. There could be no certainty in it. It should be evident to any thinking man that the true policy for Canada is not to waste time and energy in sighing for the United States market, but to follow the example of the Americans and build up in our own land manufacturing industries which will give employment to many thousands of workmen, and thus create a home market as valuable to the farmers of Canada as the home market of the United States is to American farmers. The great growth of manufactures in the United States, which the "Weekly Sun" considers so advantageous to farmers, has come about under a policy of protection. The article on the German market was published in the "Weekly Sun" of October 31st under the heading, "Will Soon be the Greatest of Europe's Markets." It begins with a summary of a United States consular and trade report showing that Germany is increasing in population and wealth much more rapidly than the United Kingdom. There is a high protective tariff on imported foodstuffs, as well as on imported manufactures, and the "Weekly Sun" points out that in consequence the farmers of Germany get very high prices for their farm products, much higher than the farmers of free trade England. The "Sun" might also have pointed out that in both the United States and Germany, while farm products have increased in price under protection, the prices of manufactured goods have been reduced. The "Sun" concludes that Germany will, following England's example, adopt free trade in order to bring down the price of farm products, and that consequently Germany, which is now such a splendid home market for German farmers, will soon surpass Great Britain as an importer of foreign meats and breadstuffs.

It is rather queer that the "Weekly Sun" cannot see that the policy of protection which has so benefited the farmers of the United States and Germany by furnishing a great home market, and thus enhancing the price of their products, will have a similar effect in Canada.

ARE OUR TRADE RETURNS RELIABLE?

OUR export and import returns are cited again and again. Are they really trustworthy?

Take imports from Great Britain. They are not really British sales to Canada alone; they include the great masses of goods bought in other countries and merely reshipped to us. They include also many goods imported into England and given a fine finish and then sent out as British, although nine-tenths of their labor is German, or French, or Austrian. They include also quantities of American goods shipped to England and back to Canada in order to get the advantage of the preferential tariff. Something is being done to check these fraudulent preferential imports, but the measures so far taken are not sufficiently stringent.

And what is to be said of our imports from the United States? People note the great growth of American sales to Canada. And they undoubtedly have grown. But enormous quantities of British goods are sent to United States seaboard ports and reshipped here by the United States agent (if they are duty free) as American goods. Many British houses follow the old practice of giving their Canadian market to their United States agents, and under these circumstances trade goes through the United States. Until some investigation is made of these and relative conditions which seriously affect the reliability of our import statistics these trade returns must be regarded as unreliable.

ADVANTAGES OF INTERNATIONAL EXHIBITIONS.

EXHIBITS of Canadian goods in foreign countries do not always appeal to the ordinary manufacturer very strongly. The exhibitions are far away, and the business man often feels that the lack of personal intercourse with buyers nullifies the effect of the show. That this is a mistaken idea is shown by an extract from a communication read by Mr. Ed. Freyseng at the Manufacturers' luncheon held in Toronto recently. The communication was from the head of the firm who has been in Europe for six months, and so has had ample opportunity of meeting business men and manufacturers. He reports that the Canadian exhibit at Milan has done more for Canadian trade than any amount of advertising could do. There was presented to the eyes of hundreds of thousands of people products, the description of which would not in many cases have been credited. Only by being seen and inspected was the possibility of their production in Canada driven home to the people of Europe. Many as a consequence have opened up correspondence with Canadian firms with a view to developing business.

In the exuberance of spirits which accompanies our great national development we have come to think possibly too much that everybody else recognizes how great we are. But a general appreciation of this fact is not sufficient to establish business relationships with individual distributors or consumers. Canada must bring to their attention the fact that she manufactures or produces the specific articles wanted, and not only produces them, but produces them of the highest quality at a fair price. International exhibitions provide an excellent opportunity for this. The buyers are assembled in large numbers, and comparison with products from elsewhere is possible.

The Canadian exhibit at Milan is reported to be very effective. Our building is exceptionally attractive, and a thoroughly satisfactory showing of the country's wealth is made. The same has been done elsewhere. On November 1st the great Exhibition of Australasia opened at Christchurch, New Zealand. Canada is there represented with what is described as the best outside exhibit, with the possible exception of Great Britain.

All this will mean an increased export trade, particularly to those who make individual exhibits, but also to all Canada, by the general advertising which is given to the whole country.

EDITORIAL NOTES.

Under the heading of "Brotherly Love Continues," "Commercial Intelligence," of London, the leading industrial paper of the Empire, reproduces a cut of the cup to be presented by members of the Canadian Manufacturers' Association to the London Chamber of Commerce. The cut is the same as that shown in September INDUSTRIAL CANADA.

Denatured alcohol sells for 23½ cents per gallon wholesale in Austria. In Germany the retail prices are: 95 per cent., 30 cents a gallon; 90 per cent., 27 cents per gallon. Wholesale prices range from 25 to 26 cents per gallon. In France the cost is about 30 cents per gallon. In Canada it is 80 cents. We must get into the class of other countries.

The fire at the Exhibition grounds in Toronto during the past month draws attention to the need of watching municipal works more closely. In the case in question the insurance carried by the city on the buildings was altogether inadequate, and the watchman service was ridiculously small. Every city has its municipal buildings, and many of them own lighting plants and pumping stations. Are these adequately protected? How many know? An intelligent interest by manufacturers in the affairs of the municipality in which they are located would frequently be of advantage in anticipating losses. It is small satisfaction after a loss has occurred to know that somebody should have been looking after the matter.

The following letter has been received from Mr. John B. Jackson, Canada's Commercial Agent at Leeds, Eng. It is an acknowledgment of the receipt of manufacturers' catalogues, which have been collected and forwarded by this Association:—

"I am exceedingly pleased to know that I am to receive for this office the complete set of catalogues as shown by the enclosed list. This will fill a long-felt want. I wrote to the Superintendent only a few days ago, urging upon him the necessity of having these catalogues in the hands of the Commercial Agents here at as early a date as possible.

"At all times I am pleased to hear from the Canadian manufacturers, and will do my utmost to answer any enquiries from them, and to give them such information as may be of service to them, individually. In this regard I should be pleased to hear from any of them, with suggestions as to their goods, and trust that this office may be able to be of service to them in the English market.

"You might also let it be known among the manufacturers, that I consider posters and calendars from the different firms would be of use to them, especially when hung up in this office; and I should be pleased to have them sent from the individual firms direct."

We might again draw attention to the fact that catalogues will be forwarded to all Commercial Agents of Canada if a set of thirteen be sent to the Secretary of Canadian Manufacturers' Association. The suggestions contained in the above letter from our Commercial Agent at Leeds are worthy of every consideration from those who are developing an export trade.

A MANUFACTURER'S POINT OF VIEW

How a Better Relationship Between Employer and Employee is Possible.

NO essential difference of interest exists between employers and employees. The fundamental truth that that which benefits capital must likewise benefit labor presses for recognition at all times. Hence a sane discussion of the present relationship of the two forces is ever welcomed. Such a discussion is presented by Jonathan Thayer Lincoln in the September issue of the "Atlantic Monthly." Mr. Lincoln is singularly well fitted to expound such a subject. Gifted with an observant and sympathetic nature, he is closely allied with large manufacturing enterprises and with movements for the betterment of the conditions of workmen. He is the personal friend of all who work for him.

Mr. Lincoln points out as an introduction that "in modern manufacturing economy is the dominant note. The days before the advent of steam and electricity were days of small volume of business and large profits; but to-day the reverse of this condition obtains, and we find that as a rule the ever increasing volume of business has been accompanied by an ever decreasing percentage of profits. Competition has reduced the margin of profits to a point where the cost of production must be kept at the minimum by every contrivance the manufacturer may invent."

"Labor in its last analysis is a commodity, just as much as cotton, and is subject to the unalterable law of demand and supply; and the manufacturers who in these days of keen competition would keep their factories in successful operation, paying to the shareholders a just interest on their investments and at the same time furnishing thousands of workers with the means of earning a livelihood, can pay only the market price for necessary commodities, whether cotton or labor."

Relationship of Employers and Employees Changed.

The organization of big industries has introduced new elements into manufacturing. The two new conditions which have exercised the greatest influence are the factory system and modern machinery. The factory system has defined the relationship clearly between employer and employee. One is the buyer, the other the seller of labor; "but," says the writer, "while labor is a commodity, like cotton, coal, oil, reeds, harness, or any item entering into the cost of production, there is added to it the human element." The conflict between labor and capital must be settled by the recognition of the common humanity of the man who sells and the man who buys.

Machinery has been criticised from the beginning as prejudicial to human labor. But machinery, while it does the work of many men, has not degraded labor. Rather it has placed it on a pinnacle never reached before its introduction. The finer and more complicated are the operations which it performs, the higher is the intellectual effort represented by it and the better the work required from the workman who directs it.

Machinery Does Not Degrade Labor.

Take, for instance, the machines used in cloth making. Some of these approach human intelligence in their work, reproducing the exact movements of the old hand weavers. Yet for all, the skill and ingenuity of those who tend these machines, which do what a thousand hands formerly did, are greater than that of the old workers. The writer cites the instance of a double engine of the triple expansion Corliss type indicated at three thousand horse power, capable of producing the power required to raise ninety-nine million pounds to the height of one foot in one minute. "How many laborers, think you," he asks, "would be necessary to accomplish this tremendous task? And the machine itself is the perfection of mechanical skill; in it is the perfect adaptation of means to an end; it is the visible expression of intellectual as well as physical power, for by its means the irresistible forces of nature are controlled and directed by the will of man." In fact the whole factory is a machine, in which the manager operates every unit to the best advantage of the whole, and each workman is a part, bearing a distinct and decisive part in the final product.

Workmen Not Brutalized.

The case of a workman is cited. "I have worked on the same machine for twenty years," said an old slasher-tender one day, "until I have come to know the machine, and the machine to know me." The statement is very suggestive, and the workingman who made it had the imagination of a poet. "I have come to know the machine—and the machine to know me." In a sense the man does become a part of the machine he operates; and the more he becomes a part of it, the more effective will be his day's work. He becomes a part of the machine in that his intelligence animates it, in that he makes himself the master of his instrument.

"The man who had the imagination to make the statement just quoted was not brutalized by twenty years of labor, operating machinery. I know this man in his own home, and I believe that in his daily life he deserves, as few of us do, the name of Christian gentleman; and his wife, although day in and day out for many years she has tended eight looms in a Fall River cotton mill, deserves, as few women I have ever had the honor to know, the rare title of lady."

"Let us take this man and this woman as types of the brutalized working people, and in their home seek further light concerning the problem. The husband came to this country from Lancashire in early manhood, being then by trade, as he is now, a slasher-tender. The wife came to America in childhood, attended the public schools until by law she was permitted to work, when she became an eight-loom weaver. After their marriage and their wedding journey from the church to their tenement, they returned to their work, and, in the ten or twelve years following, saved enough from their wages to buy a comfortable home, costing perhaps three thousand dollars, and had in the savings bank a balance sufficient to make it seem to them that the wife might with prudence leave her looms in the noisy weave-room and devote her time to her home and the two daughters, for whom she had the ambition that they might receive the education which would remove them beyond the walls of a factory. Her life of comparative ease was brief, for within two years another child was born, and after a time, fearing that the added expense of bringing up the newcomer endangered the fulfillment of her ambition to educate her daughters, she returned to the factory and remained there until she had made her vision a reality."

Strengthen Personal Relationship.

So much as a proof that there is nothing essentially brutalizing in modern factory conditions. There are many reforms, however, which can be made and which will help to revive the old feeling of fellowship between employer and employee. How this can be best done, Mr. Lincoln illustrates by a concrete example. "There exists," he says, "to my own knowledge one factory which for half a century has exemplified in its management the ideal for which I am contending. It is a small concern, employing at the most not more than three hundred hands. The superintendent knows each of his men personally; he talks with them about the things nearest to them, the little happenings in their home life, which to them are as dear as are the joys and sorrows which lighten or make dark his own fireside. In event of an accident to any of them, the doctor's bills are paid and their places held for them until their recovery. In the fifty years of this corporation's history it has been called upon to defend in its courts but one tort case, and that brought by a miserable fellow with an illustrious criminal record, who tempted Providence to crown it by perjuring himself to obtain a few dollars from those who for twenty years had befriended him. In the fifty years of the history of this corporation there has occurred but one strike. brought about by walking delegates who knew nothing of the conditions which obtained there; and that strike lasted but seven days, when the men returned in a body under the conditions which had previously existed."

"The method here employed may be called utopian, but the results prove it to be practical. At the same time the two incidents cited illustrate the difficulties which the manufacturer encounters in establishing a better social understanding with the workingman. The man who sells labor, as a rule, misunderstands his employer quite as often as the manufacturer misunderstands him. He fails to realize that his employer is a human being, endowed with an immortal soul, who has the welfare of his employees at heart; he fears the Greeks bearing gifts, and cannot understand that the man who buys labor may act from an altruistic motive. He often assumes the same attitude toward his employer which he fancies that his employer holds toward him, and he makes the meanest, the most selfish motives the basis of his trade. In my personal experience, the man who is most thoroughly hated by his employees is the man who has the physical, mental and spiritual welfare of his workingmen most at heart."

Influence of True Leader

But, you may say, the manager of a factory employing ten times the number of men mentioned in the above illustration, cannot know all his men. Quite true. But the principle advocated above may be carried out as well in the large establishment as in the small. The good man will know his men through his subordinates, and his influence will be felt by every workman as a healthy inspiration.

The writer discusses at length the various phases of the big strike at Fall River in 1904. He uses the facts of this conflict to show the influences which move workingmen in their actions. The number of men affected and the long duration of the conflict make it an important study. The lessons drawn from it are worthy of consideration. The whole article is healthy in tone and optimistic. Mr. Lincoln sees, not a glimmer breaking through the clouds of mutual misunderstanding, but a broad shaft of light completely dispelling them. All will pray that his hopefulness be amply justified.

THE METRIC CONTROVERSY SITUATION.

A PRACTICAL test of the value of the metric system will be made by Kynochs, Limited, manufacturers of explosives in Birmingham, England. "The actual process of changing from the old order to the new will be a surprisingly simple matter," says Mr. Chamberlain, the managing director. "It will only mean the alteration of the scales on the arms of the weighing machines and the simplification of our account books. Instead of eight or nine columns for the different weights, followed by three for the money value, we will only want two—one for the weights and one for the values."

In discussing this action of Kynochs, an official of the Decimal Association says: "Kynochs have done in advance what we believe the commercial world will ultimately be compelled to do. At present we make difficulties for ourselves in relation to our foreign trade with metric countries. Our Consul for Algeria in his last annual report says: 'Millions are lost annually to British manufacturers by not adopting the metric system, and by not quoting prices in the moneys of the countries to which they wish to export.' "

Anti-Metricists Score.

The other side of the shield is shown in the second annual report of the British Weights and Measures Association. The ease with which the change to the metric system may be made in the case of Kynochs is probably explained by the fact that they use weight and not measurement. Measurement entails a rigid shape, which in turn requires machines of definite parts to work with. That is the great objection urged by manufacturers to the metric system, the necessity of altering an immense amount of machinery in their own plants, and the necessity of always being able to supply parts for machines made under the old system. A duplicate plant would be practically necessary.

The Vice-President of the Westinghouse Co. puts the case thus:—

"There are now in use, and rendering good service, over 3,000 railway motors, which we built from 1892 to 1895, and for which we daily get orders to supply repair parts.

The first of the great generators at Niagara Falls were supplied over ten years ago, and they will be used for many years yet.

There are thousands of motors and generators of various types, which we built from five to ten years ago, which will be efficient for years to come, and for which we are constantly supplying repair parts. This simply means that certain parts naturally wear out in use, and, when replaced, make the machine as good as ever. The "repair part" business of my company amounts to about a million dollars a year. This is not surprising when it is known that the total output to date is valued at about $200,000,000."

Oil Fields of Ontario.

The actual output of oil and gas from the new fields in the county of Kent seems to outdo even the optimistic reports which have been circulated from time to time during the past few months. Eighty or ninety wells have been drilled during the last five months, and some of them are producing at the rate of 300 barrels of oil a day. Two or three wells actually had an initial flow of 500 barrels a day.

The supply of natural gas is no less great. A single well has a capacity of eight million cubic feet a day at a pressure of 600 pounds. The people of Chatham are now looking forward confidently to getting cheap light and fuel for both houses and factories.

A RELIEF FOR CAR SHORTAGES

Reciprocal Demurrage Would Remove Delays.

When demurrage was being generally discussed last year it was frequently stated by railway officials that the enforcement of a penalty against shippers and consignees for delays to freight cars would go far toward reducing the complaints of car shortage and delays to traffic which were so prevalent. A set of provisional demurrage rules was afterwards approved by the Railway Commission, and has been in effect since March last. What has been the result? Have the car shortages disappeared or has there been any marked inmprovement in the handling of freight traffic by the railways? The shortage is greater this year than ever before and delays to freight with the other irregularities in transportation complained of have not been abated.

The Railway Act appears to have been passed with the intention of requiring the railway companies to provide adequate facilities to receive, carry and deliver all freight traffic without delay, but apparently there is no practical way open to the shipping public to enforce these provisions. True, shippers or consignees who are forced to suffer financial loss through delay or failure in delivery by the railway companies may take action for damages, but while such losses are enormous in the aggregate they are distributed over the whole of the shipping public, and it is not likely that any individual shipper will undertake the great trouble and expense of legal proceedings against a railway. This renders the railways practically safe from prosecution in the courts, and their interests have now been further protected by the demurrage charges which the Railway Commission authorizes them to collect. The practical effect of the present system has been to increase the revenue of the railway companies and protect them against delays to their equipment for which the public is responsible, while on the other hand the shipping public is left at the mercy of the railways in the matter of car supply and prompt carriage of traffic.

Prompt Delivery of Cars Necessary.

It is undoubtedly a matter of public interest that steps should be taken to insure the prompt movement of freight cars so as to keep them available for service as far as practicable, but this will not be accomplished by penalizing the public, while the railways who are responsible for the greatest amount of delay are let go free. The Railway Commission has the power if it would only exercise it, to provide a large measure of protection to the public against car shortages and delays to freight on railways. If the system of detention charges against railway companies, commonly known as reciprocal demurrage, were put in force the trouble would rapidly disappear. The reciprocal plan provides that where railways fail to supply cars within a reasonable time to transport loaded cars a stated average number of miles per day, or to promptly deliver cars after arrival at destination they will be liable to the shippers and the consignees for a demurrage penalty for each day's delay.

A few years ago delays to freight cars interchanged between railways became so burdensome that the railways found it necessary to adopt what is called the per diem system. A railroad using the freight cars of another line is required to pay a nominal charge for each day the car remains in its posession; if the car be delayed beyond a stated period there is a penalty added. Immediately this system was adopted a marked improvement came over the methods of handling "foreign" equipment on railways. One of the large railroad papers in the United States estimated that within a year the enforcement of the per diem rule stimulated the activity of freight cars at least 12%, probably 15 to 20%, and this was equivalent to giving the railways an increase of 12% in the total number of freight cars in use in the United States and Canada. The per diem system has proved so satisfactory that this year a majority of the railway interests in the United States agreed to an increase in the per diem rate.

Exact Penalty from Railways.

If such good results flow from the imposition of a nominal charge per day for the use of freight cars between railways, we are safe in assuming that were railways made liable to shippers and consignees where they failed to promptly furnish cars and transport freight the movement of all traffic would be greatly accelerated. Any necessary additions to equipment would promptly be made, as they were when the per diem system became operative.

In the United States the legislatures and Railway Commissions have gone into this question and reciprocal demurrage rules are now in effect in the States of Virginia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, Florida, Georgia, Iowa, Kansas, Missouri, Minnesota, Washington and the Territory of Oklahoma. In Michigan reciprocal demurrage rules are not in force, but the "average plan" has been adopted. In Ohio until this year there was an agreement between the shippers' associations and the railways which provided for the appointment of a joint committee to deal with car service matters. This agreement has now lapsed and it is expected the reciprocal demurrage arrangement will be secured through the Legislature of that State. In the New England States demurrage charges are checked by the law of Connecticut, which forbids the collection of a demurrage toll for any delay up to four consecutive days, legal holidays and Sundays excepted, but the railways there are always willing to agree with the shippers upon the average plan for assessing charges for delays to freight equipment.

It is the duty of the Railway Commission to provide protection to the public similar to that which they have granted the railway companies, or failing that they should withdraw the provisional car service rules.

Exhibition of Made-in-Canada Goods.

On October 22nd Z. Paquet, Quebec, opened a sale of Made-in-Canada goods. The big department store exhibited Canadian goods from one end to the other. In the announcement of the sale it is mentioned that in 1671 Intendent Talon boasted that he could clothe himself from head to toe with articles made in Canada. The exhibition of goods now placed on view show little likeness to what was made then. From the articles on exhibition not only can a man clothe himself, but he can provide all the luxuries of life

THE SUPPRESSION OF INDUSTRIAL SMOKE

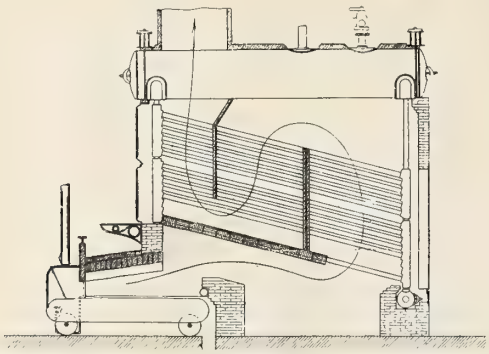
With Particular Reference to Steam Boilers.

By M. BEMENT, before the Western Society of Engineers.

THE problem of burning bituminous coal without producing smoke can be divided into two distinct features, one referring to legislation and its enforcement, the other to the technical or engineering phase of the matter, and it is more particularly the latter feature that is considered in this paper. It is the author's wish to emphasize certain fundamental principles upon which the complicated and difficult problem of smoke production and suppression rests, rather than attempt the detailed treatment of any individual condition or set of conditions.

It is a recognized fact that bituminous coal can be burned without smoke; also that the consumption of the volatile gases results in increased economy, and, while great improvement has been made, there is very much still to be accomplished, and the great and foremost requirement is a technical one, demanding not only a recognition of the principles involved in smokeless combustion, but better engineering practice as affecting design of plants and furnace apparatus. In the author's opinion, the people who are to blame for present conditions may be divided into three classes in the order of their responsibility:—

First—Manufacturers of furnace apparatus.
Second—Consulting engineers and architects.
Third—Purchasers who operate the apparatus.



In considering the matter from the standpoint of manufacture, the important fact should be emphasized, that with one possible exception, there are, strictly speaking, no smokeless apparatus made. This single exception will be mentioned later, but it is first desirable to outline the requirements governing smokeless combustion. They are—

Essentials for Eliminating Smoke.

First—Uniform evolution of the volatile gas, which requires with a stoker a positively uniform feed of the coal.

Second—The location of a chamber of sufficient length or capacity between the fire grate and exit to the boiler to ensure that the volatile gases shall become thoroughly mixed with the air which enters with them.

Such chamber, which the author has called a furnace, to distinguish it from the grate, must, of course, be made of refractory material to enable it to withstand the heat, and its walls necessarily become red hot; this has caused many people to believe that the high temperature in itself was the cause of the volatile gases being burned, failing to take into consideration the fact that the most important requirement is a thorough mixing of the gases with the air in the chamber. Failure to realize this fact has resulted in disappointment with many brick arches, "Dutch ovens," etc. The chain grate owing to its feed of coal being on a horizontal line, ensures a positively uniform rate in the feed, and consequently there is a steady evolution of the volatile gas, which will be burned if there is such a furnace located between it and the boiler, and this apparatus may properly be called smoke-proof, because it is impossible for the operator to either cause or allow the coal to be fed in other than a steady and uniform manner.

Even when a very large furnace chamber is used with any form of stoker (other than a chain grate) or a hand-fired grate, a smokeless condition is dependent upon careful manipulation. For example, with a hand fire, if too much coal is added at one time, the evolution of gas will be greater than the mixing capacity of the chamber; or, with sloping grate stokers, when a large quantity of coal is poked or slides down the grate, the result is the same as when a large charge of coal is added to a hand fire. Thus, the fuel feeding apparatus or method of manipulation must not overtax the mixing capacity of the furnace chamber, if a smokeless result is to be secured.

A Successful Type.

The accompanying illustration shows the latest and best type of smoke-proof steam generator, its furnace chamber being formed by tiles covering the lower row of the tubes of the boiler. It is not a patented apparatus, and may be adopted by anyone who wishes to do so. In fact, many boiler plants now installed may at small expense be altered so as to conform to all of its essential requirements

For a clearer understanding, it is essential that furnace apparatus be considered in two classes, one which is smoke-proof, the other depending upon careful manipulation for good results. This latter class may also be separated into two divisions, those which by reasonably careful working will be smokeless, and others, which it is very difficult to operate without smoke. Thus, there are three grades of apparatus, the perfect, the moderately good, and the bad.

To Better Existing Conditions.

The effort of health departments and smoke inspection bureaus should be to enforce the adoption of the perfect apparatus, proper manipulation of the moderately good, and the abandonment of the bad

The position of the smoke inspector from the engineering standpoint is a difficult one. As a general rule he is an administrative official, appointed or elected for the purpose of enforcing laws, and his time and efforts are taken up in such work, and the character of the requirements largely determine the training of the man selected. It necessarily follows that often he is not an engineer—at all events to that extent necessary for the solution of the difficult engineering problems encountered; the conditions under which he must necessarily work prevent to a very great extent his becoming technically proficient, because the tendency would then be for certain apparatus to be recommended in preference to others; this immediately results in trouble, caused by the influence of manufacturers who would not be favored. As it is, if a prospective purchaser applies to a smoke inspector for information as to the most desirable apparatus to be procured, he may be referred to a number of plants which are examples of good practice, in which he may find a variety of apparatus. After selecting one of these he often finds after it is in service that under his conditions it is not satisfactory; upon further investigation, he discovers that others labor under as much difficulty as he, and thus often feels that he is an innocent victim of circumstances.

ACROSS WESTERN CANADA WITH THE C. M. A.

A Brief Account of the Trip and the Entertainment, with a few Observations on Western Problems.

THE ASSOCIATION IN WINNIPEG.

THE October INDUSTRIAL CANADA reported in full the proceedings of the Thirty-fifth Annual Convention of the Canadian Manufacturers' Association, held in Winnipeg, September 17th, 18th and 19th, 1906. The Convention was probably the most successful the Association has ever held. It was certainly an evidence of the wonderful progress of Canada's Great Middle West. The business interests of Winnipeg and of the magnificent country served from Winnipeg were of such importance to the manufacturers of Nova Scotia, New Brunswick, Quebec and Ontario, that over 400 of them were present. The Association does not believe that it was the meetings alone which attracted this large attendance. The meetings, no doubt, were the incentive, but every manufacturer in Canada is interested in Winnipeg, either as a consuming centre, a distributing point, or a future manufacturing location. No one was disappointed. It was a revelation to all to see such a magnificent city growing up so rapidly and taking its place as one of the important commercial and financial centres not of Canada but of the continent.



A Group of Excursionists.

The Winnipeg Greeting.

Although the social features of the Winnipeg meeting have been described before, the great kindnesses extended by the citizens cannot be passed over without a further expression of the appreciation of the visitors. Little did the members of the Association think, when word came from Winnipeg that a most elaborate programme of entertainment was being prepared, that it would be carried out as lavishly and extensively as it was. The entertainment extended by the Honorable, the Lieutenant-Governor, Sir Daniel McMillan and Lady McMillan was flattering to the Association, and this attention will be long remembered by those who were privileged to be present. Mr. and Mrs. E. L. Drewry's reception to the ladies at the Country Club was thoroughly enjoyed. The City Council spared no effort to make the first night's reception brilliant and delightful. The musical programme was of the highest order, and the dance and refreshments were enjoyed by all.

It is very likely that, if the Western Canada Flour Mills and the Real Estate Exchange had not assisted the local manufacturers in showing their city to the best advantage possible, a large number of the visitors would have left Winnipeg without having a proper understanding of its great size and growth. The plant of the Western Canada Flour Mills was the only manufacturing institution officially visited, but if it is to be taken as an index of what Winnipeg will be in the future, Canadians may well rejoice in such enterprise. It was an agreeable surprise to many when the Real Estate Exchange mustered nearly one hundred automobiles for the purpose of taking the party around the city.

As a matter of fact, everything undertaken by Winnipeg was carried out most successfully. The manufacturers owe to the good people of that city a deep debt of gratitude. The personal interest which everyone took in the visit made the party feel that they were not strangers being entertained, but that they were right at home. The credit for this success is due to the noble band of manufacturers who have made Winnipeg their headquarters, and who are identified with the Manitoba Branch of the Association. Mr. Edward L. Drewry, the "grand old man" of Winnipeg, the Chairman of the Manitoba Branch, and Mr. W. J. Bulman, the Honorary Secretary, worked incessantly. The Manitoba Vice-President, Mr. L. C. McIntyre, the members of the Executive Committee, the members of the Reception Committee, and practically all the members of the Association in Winnipeg seconded their efforts.

The Journey West.

The train which the Canadian Pacific Railway provided for the Excursion from Winnipeg west, probably the finest that ever crossed the continent, was made up of seven new C. P. R. sleeping cars, the compartment car "Qu'Appelle," the private car, "Earnscliffe," two dining cars, and a baggage car. The train was well looked after and the service excellent.

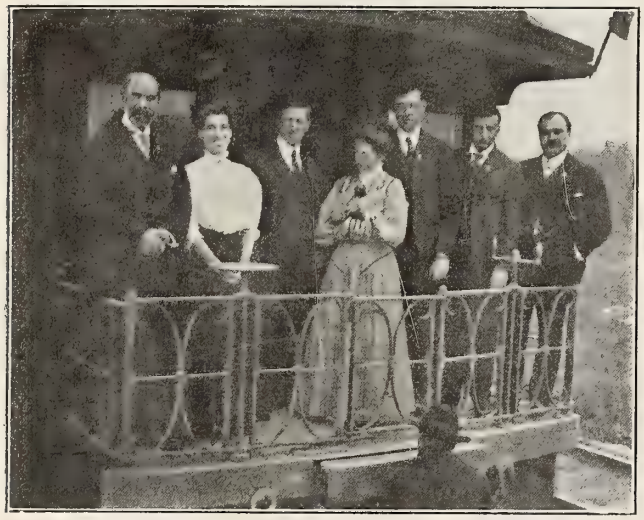
The first day after leaving Winnipeg an Executive Committee was appointed, consisting of President Cock-

shutt, and Past President Ballantyne as Honorary Presidents, Mr. R. J. Younge as Working President, and representatives from the different cars as follows: Car 1, Mr. R. Thomson; Car 2, Mr. C. B. Hunt; Car 3, Mr. John Firstbrook; Car 4, Mr. W. K. George; Car 5. Mr. W. K. McNaught; Car 6, Mr. L. V. Dusseau; Car 7, Mr. D. J. Fraser; Car 8, Mr. E. L. Drewry; Car 9, Mr. W. J. Bulman.

This Committee, with Mr. J. F. M. Stewart as Secretary, met every day and handled all the details of the Excursion arrangements.

A Truly Canadian Reception.

The cordiality of the reception received in Winnipeg appeared to spread over the entire west and was experienced in every municipality the Excursion party were privileged to visit. The way in which the individual towns turned out to make known their claims to future greatness, and the interest everywhere manifest, was very complimentary. One thing that was noticeable and which was present everywhere throughout the Western Provinces, was the great pride, confidence and loyalty of the people to that particular centre in which they chanced to live. Every man was enthusiastic about his own town. It



Rear of Official Car showing a number of Prominent Members.

was a healthy enthusiasm and in very few instances did one town aspire to greatness by trying to belittle the progress and prosperity of a neighbor. The feeling is everywhere present that the development and growth of Western towns have only started, and that there is a great future before every one of them. The cities on the Coast are older than the cities of the plains and are probably more conservative, but there too the same optimism prevails and the same signs of advancement and prosperity are noticeable. These cities are feeling in a remarkable way the development that has begun throughout British Columbia. Vancouver, particularly, is forging ahead. The wealth behind the city and its situation as the great Western port of Canada are being appreciated. Vancouver's development and progress, no less than its conservatism, are worthy of the pride and admiration of all Canada. With the opening of Vancouver Island, Victoria, too, is prosperous, but its situation does not permit of such rapid expansion as Vancouver is experiencing. As a city of homes it is known everywhere throughout the West, and truly it would be hard to find a more delightful city to live in.

The Two New Provinces.

Throughout Alberta and Saskatchewan everything is bustling. The value of land in the towns and cities, in some points at least, has probably got somewhat ahead of the general development. While this appeared to be the case to some of the visitors, arguments to the contrary were freely advanced by residents. The high price of land has not prevented the growth of the towns. Fine substantial buildings are being erected. The Dominion Government seems to have used business foresight and good judgment in erecting first-class buildings in the growing towns. The municipalities have fine municipal buildings and up-to-date schools, and are rapidly improving their systems of sewers, their roads, etc. The hotels, while there are exceptions, are not as good as one would expect where such development is anticipated; but on the other hand the retail stores have shown their faith in future returns by erecting suitable buildings and carrying very large stocks. It was noticeable, too, that the stores were uniformly busy.

The Towns Visited.

It would be impossible to attempt to describe adequately the country through which the Excursion party passed or the towns which it visited. The wheat was practically all cut, but was still shocked in the fields, and here and there a threshing machine could be seen in operation. The granary of the Empire was of consuming interest to the manufacturers. They were interested in it because their goods were being used on all the farms. They were interested because it was the land that was attracting the settlers from the continent of Europe, and from the United States, to come and throw in their lot with Canadians and become the future consumers of the products of Canadian factories. In other words the manufacturers were interested because it was these prairie lands that were going to give them their future great home market. But while ultimately their goods go to the farm, it was the present distributing and future manufacturing centres that particularly attracted their attention.

It was unfortunate that more of the growing towns could not be visited. The Excursion party did the best they could, but it is greatly to be regretted that places like Brandon, already a large and important railway point and the distributing centre for a big section of the country, and Prince Albert, one of the towns in the far north built up, as it were, in a night, had to be passed by. Both places had sent most cordial invitations.

Medicine Hat also extended an invitation to the Excursion party, which it was impossible to accept. The active Secretary of their Board of Trade, Mr. W. C. Harris, however, not to be outdone, boarded the train at Medicine Hat and stayed with the party for several days, distributing literature and discussing present and future prospects. This town is fortunate in that it has at its very doors a practically unlimited supply of natural gas, which can be delivered for power purposes very cheaply. The natural gas system is owned by the municipality.

It was not because the importance of these towns was not appreciated that they were not visited; but it was impossible, in the limited time at the disposal of the party, to crowd any more into the programme.

A Visit to Regina.

After leaving Winnipeg, Regina, the capital of Saskatchewan, was the first place visited. The party was met at the station by the energetic Commissioner of the Board of Trade, Mr. A. E. Boyle, and elaborate souvenirs, pointing out the advantages of Regina as a commercial and residential centre, were distributed. The ladies were entertained most fittingly by being driven out to the barracks of the North-West Mounted Police, a few miles from Regina, where

an exhibition of fancy drill was given for their benefit. To the men of the party the town was thrown open and they wandered at will through the large warehouses and retail stores, finding out for themselves just how many Canadian and how many foreign goods were sold and what it was necessary to do to get more of the market. The improvement in the way of public and other buildings and the roads were particularly noticeable.

The formality of an official welcome was done away with in Regina. This innvoation was particularly acceptable to the officers of the Excursion party, who had been making speeches for the three previous days in Winnipeg.

Hon. Walter Scott, Premier of Saskatchewan, was one of the number at the station to see the party off.

Moose Jaw's Reception.

The next stop of the party was at Moose Jaw. The limited time of an hour and a half was all that had been allotted to this ambitious city. Mayor D. MacLean, President of the Board of Trade, John R. Green, Secretary Hugh McKellar, and a large number of citizens, met the party, and at once undertook to show their visitors how much could be done in a short time. The party were first driven around the city, and later assembled at the City Hall, where addresses were delivered by the Mayor and President and Secretary of the Board of Trade. These addresses were responded to by the President of the Association, Mr. Cockshutt, and Mr. Ballantyne, and while it is not the intention in this account of the Excursion to report the speeches, it is only fair to say that the picturesque way in which Mr. McKellar, with the aid of a wand, impressed on the visitors the location, railway facilities, population, etc., etc., of Moose Jaw, will not soon be forgotten. After this formal meeting the Daughters of the Empire entertained the whole party to lunch. The programme was carried out so as to permit of the train leaving on time.

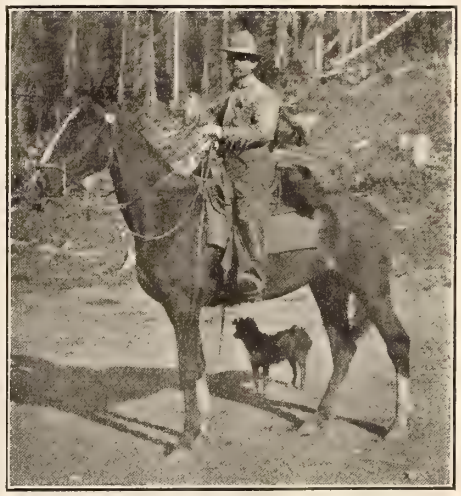
Calgary and the Irrigation System.

The Excursion train was held up about seven miles east of Calgary where the railway crosses the irrigation ditch which is being dug by the Canadian Pacific Railway at an expenditure which, when completed, will total $5,000,000. This undertaking has been described as "America's greatest irrigation project." At the present time there are 480 miles of canals and ditching in Southern Alberta, capable of irrigating 625,000 acres. The enormous impetus that this will give to the district sourrounding Calgary cannot be estimated. The seven mile drive from where the train stopped, to the City of Calgary, all of which was along the banks of these great irrigation ditches, left an impression on everyone. The Canadian Pacific Railway very thoughtfully distributed beautiful booklets giving views of the project and of Calgary and the country around, together with statistics.

The party really needed no official introduction to Calgary as Mr. C. W. Rowley, the President of the Calgary Board of Trade, was a very welcome passenger on the special train. After driving the party around Calgary a banquet was tendered by the ladies of Calgary and the enthusiasm with which the ladies here and also in Moose Jaw contributed to the entertainment of the party, was often commented upon. Speeches at Calgary were made by the Mayor, Senator Lougheed, Hon. W. H. Cushing, Minister of Public Works for Alberta, and one who really belonged to the Excursion party—Mr. A. E. Cross, Vice-President of the Association for the Province of Alberta. With cheers and counter-cheers the luncheon broke up and the party left for the mountains.

Calgary did not let the party away without presenting each member with a souvenir in the shape of a book of views, covering over 100 pages, containing in addition a short account of the industrial development and opportunities in Calgary, together with its present position as a financial, railway, wholesale and educational centre. The book was published by The Herald Company, of Calgary, and no one in the Province of Alberta, after seeing the publication, will have any excuse to go South for anything in the way of first-class printing.

Calgary is proud of its smoking chimneys, some of which can be seen for several miles from the city. Its manufacturing establishments are very creditable. Some of the more important are the plants of the Calgary Brewing and Malting Co., Alberta Portland Cement Co., Standard Soap Co., Calgary Milling Co., Western Milling Co., Cushing Bros., Limited, Eau Claire & Bow River Lumber Co., Western Planing Mills Co., Great West Saddlery Co., and P. Burns & Co. These are well-known names throughout the West and some of them are known throughout Canada. An important cereal mill and biscuit factory is now being erected. Calgary has more important factories than any city between Winnipeg and Vancouver.



A Typical Canadian Rancher.

Three Days in the Mountains.

Although the mountains in British Columbia had been seen by a number of the party on previous occasions, still it seems that they are always new, and if it was possible for one to be more interested than another probably he who had been there before and was privileged to point out certain mountains and give them their names, was the most excited. The time in the mountains was enjoyed by everyone. Entertainment and speech-making are all right in their place, but it was a genuine rest for the party to have nothing to do but view the magnificent scenery. For the first evening at the Banff Hotel, an informal dance with good music and a delightful luncheon was arranged by the manager of the hostelry, Mr. Gordon, who was most obliging in looking after the wants of the Excursion party. The day following was spent travelling on horseback, in carriages, or on foot to Tunnel Mountain, or the Hot Springs, up the river in a launch, or climbing the steep sides of the mountains to the Observatory, and other points. So enthused were the excursionists about mountains and mountain scenery that everyone on the train was astir at 6.30 the morning after leaving Banff, and tramped at what was practically the break of day up to beautiful Lake Louise, the lake which, although in the mountains, is virtually in the clouds. The view that the little lake presented well repaid the morning's tramp

The Arrival at Victoria.

On the way west no stop was made at Vancouver. On the arrival of the train the party at once boarded the C. P. R. steamship, "Princess Victoria," and arrived at Victoria in time for dinner, Monday evening, September 24th. It was only ten days since the party left Montreal and Toronto. It was almost impossible to understand how the great journey across the continent, the greatest Convention the Association has ever held, the magnificent entertainment provided by the towns visited, and the delights of the mountain scenery, had all been crowded into such a short space of time. Functions of one kind or another, receptions and entertainments, still took up the time of the party. His Excellency, Earl Grey, had just left Victoria a day or two before the arrival of the Excursion party. The city and particularly the Parliament Buildings had been tastefully decorated for his reception. As a compliment to the manufacturers the decorations were kept intact, and the whole city at night was made brilliant by the display of thousands of electric lights. The Parliament Buildings at Victoria, which in passing may be described as the most beautiful Provincial Parliament Buildings in Canada, lent themselves



Approaching the Rockies.

especially to electrical decorations and, with the shadow of the lights in the water close by, presented a delightful and attractive appearance.

From 9 to 11 p.m. on the night of our arrival the ladies of Victoria, acting in conjunction with the Tourist Association, a most active and enterprising body, held a reception in the Parliament Buildings. The reception was quite informal, and the friendly personal interest which the people of Victoria took in the visitors was much appreciated. The manufacturers were honored by hearing words of welcome from the Mayor of the City and from the Premier of British Columbia, Mr. McBride.

The next day excursions were organized to visit the Dry Dock, B. C. Marine Railway and Victoria Machinery Depot. Additional interest was added to this programme for a large number of the party who were privileged to visit an Italian man of war then in Victoria Harbor. In the afternoon a general invitation was extended to all the visitors to be present at the Provincial Exhibition. This gave a good opportunity of seeing the products of the Province. The entertainment in Victoria was thoroughly enjoyed.

The citizens certainly are proud of their beautiful city, and they have a right to be. It would be difficult to find a city with such delightful drives and parks, and which offers so many inducements as a city of homes. It was gratifying to note the activity in real estate. Much property is changing hands. Plans are being made for the erection of important business blocks and fine residences. It is to be hoped that commercialism and business activity will not in the future rob Victoria of its present distinctive position as an ideal residential city.

Vancouver.

Wednesday, September 26th, at noon the party arrived at Vancouver, homeward bound. That afternoon was the first and only day on which the weather interfered with the comfort of the excursionists, and even then the rain did not dampen the spirits of the travelers or keep them from spending their money in "Chinatown." A large number were disappointed that the weather would not permit them to go on the street car ride which had been arranged and visit some of the great saw mills which cover the shores of Burritt Inlet. These saw mills, which are centred in Vancouver, but are scattered along the coast and through the mountains, provide a most important part of British Columbia's commercial activity.

The Canadian Forestry Association were holding sessions in Vancouver at this time, and quite a large number of manufacturers attended their meetings. Additional importance was given to the meetings by the presence of His Excellency, Earl Grey, who was much interested in the proceedings.

The following notice appeared in the official programme of the Forestry Association, September 26th, 1906:—

> "9 p.m.—Joint Banquet by the British Columbia Lumber and Shingle Manufacturers' Association, The Mountain Lumber Manufacturers' Association, Vancouver Board of Trade, and the British Columbia Branch of the Canadian Manufacturers' Association, to His Excellency, the Governor-General, His Honor, the Lieutenant-Governor of British Columbia, and the visiting members of the Canadian Forestry Association, and the Canadian Manufacturers' Association."

This complimentary banquet was most successful. It was very elaborate, and the visitors enjoyed it thoroughly. His Excellency, the Governor-General, made a remarkable speech and the other speeches were of a high order. The Association was honored by having President Cockshutt and Past President George on the Toast List. Mr. John Hendry, Vice-Chairman of the Association for British Columbia, was Chairman of the Banquet. Mr. Hendry is known from one end of Canada to the other. He was particularly well-known to a large number of the visiting manufacturers. His activity in lumbering, railroading and other enterprises have done much to bring British Columbia to the front in recent years. He is an excellent representative of the Coast Province, and made a first-class presiding officer.

The afternoon following, tally-ho's took the ladies of the party from the Hotel Vancouver for a drive around Stanley Park, and afterwards to the residence of Mrs. John Hendry, where they were received by Mrs. Hendry. At 6 o'clock on the 27th the train started for the East. On the platform were a great many friends, and amongst them Mr. R. P. McLennan, who had so ably piloted the party from Winnipeg through to Vancouver. Besides being the Chairman of the British Columbia Branch of the Canadian Manufacturers' Association, and having large business interests. Mr. McLennan was one of the most popular men on the train, and he was left behind very regretfully.

Picturesque Chinese Parade.

The Oriental residents of Vancouver presented His Excellency, Earl Grey, with an address the same evening of the banquet. There were several hundred natives of China in procession, each carrying a Chinese lantern, and big banners, expressing loyalty to Canada and its institutions, were held high aloft. Their address was formally presented at the Hotel Vancouver and reply made by His Excellency.

Homeward Bound.

On the return journey between Vancouver and Strathcona the Excursion train only made two stops. One was to give the passengers the opportunity of climbing up the glaciers. Some few did this but the majority were content to examine them from afar. The other stop was at Red Deer. This is one of the most important towns between Calgary and Edmonton on the Calgary and Edmonton Branch of the C. P. R. An invitation had been extended by the Red Deer people to have the party visit their city, but as the train passed through early in the morning it was impossible. The Red Deer people thoughtfully supplied booklets, giving information about the town and the surrounding country, so that, although there was not an opportunity of meeting the citizens, still the party had a good idea of the progress of that part of the country, which, by the way, was considered by the travelers to be quite the equal, from a farming standpoint, of anything passed through.

At Red Deer the party was joined by the Mayors of Strathcona and Edmonton, and representatives of the Boards of Trade of these two cities. The party was also honored by having Mr. Richard Grigg, Commissioner of the British Board of Trade, visiting Canada for the purpose of appointing British Commercial Agents, join the train, and he stayed with the party until the arrival at Winnipeg.

A View of Strathcona.

At Strathcona the train was met by carriages and everyone who wished to drive had the opportunity. Many drove and a few walked, but everyone ended up at one of Strathcona's very creditable schools, where a formal reception was held and addresses of welcome delivered. The reception was most cordial, and the present and future of Strathcona was discussed in a business-like manner. The reception was much enhanced by the exhibition of the products of the soil, the mine, the forest and the factory, which had been gathered together by the City Council and Board of Trade for the benefit of the travelers. Their vegetables and grains were remarkable, but that was expected. What received probably the greatest attention was the coal, which is situated at Strathcona's very doors, and is practically on the surface. It is so plentiful that in some places it can be seen, and all that is necessary is to dig it up and have it transported to the home or to the factory. The other exhibits that made the travelers open their eyes were the products from the planing mills, breweries, packing houses, flour and cereal mills, and other factories, but most noticeable of all, the very creditable production of woolen goods. These goods were not high class tweeds or worsteds, but were goods built for the country. It will not be long before Strathcona can hold, with credit to itself, a "Made in Strathcona" exhibition. It would be a healthy sign for our Western towns to take a local pride in the product of their factories as they do in the development of their towns.

Edmonton.

The very friendly greeting commenced in the morning by Strathcona was continued all afternoon and evening by Edmonton. Strathcona and Edmonton are sister towns, separated only by the Saskatchewan. Edmonton is the larger, and is growing the more rapidly. There did not seem, however, to be the rivalry between citizens as is frequently the case with towns situated so closely together. This is accounted for by the fact that both towns are going ahead and are prospering. The completion of the high level bridge, which will be built during the coming year, will do much to bring the towns closer together, and if this bridge is followed by a street car service another link of union will be cemented. To the outsider it seems a pity that the two towns do not unite their forces and grow up together. If this is done, it is hoped that a suggestion that the name "Strathcona," which means so much to the development of the West and the advancement of our whole Dominion, will not be lost sight of. The citizens of Edmonton drove to Strathcona and took charge of every member of the party. The automobiles and carriages were not put away till dark. They were at the complete disposal of the visitors to drive anywhere and everywhere. Edmonton has shown a remarkable growth. The main street of three years ago is practically unrecognisable in the main street of to-day. Fine substantial buildings are being erected everywhere. It is certainly to the credit of Edmonton that so many of the leading Canadian banks have not only opened branches there but are erecting beautiful banking houses. The same optimism and enthusiasm prevails in Edmonton, as was found everywhere throughout the West. The citizens, we grant, are quite within their rights when they refer to the situation of their city in glowing terms. The great and beautiful Saskatchewan River flows past its doors, and on either side is an embankment some hundred feet high, with Strathcona on one side and Edmonton extending for some miles on the other. Edmonton is a city where big business is and will be done, but it is also a city where men will delight to live even after they have made their fortune.



A Glimpse of Mountain Scenery.

The Fur Trade.

It will not be out of place to refer to one branch of trade that Edmonton lays claim to, that is the fur trade of the great North. Furs to the value of $1,000,000 are brought into Edmonton annually. This means more than the fact that $1,000,000 in cash is paid out for furs, and the furs shipped to London and Paris. Hundreds of years ago the fur trade started as a barter trade and, with some changes and modifications, it is practically a barter trade to-day, so for the $1,000,000 worth of furs, $1,000,000 worth of goods are sent into the north country.

Situation of Edmonton.

The land for 200 miles from Calgary to Edmonton was, as noted before, as good as the Excursion party had seen. East from Edmonton on the Canadian Northern and the Grand Trunk Pacific it is equally as good if not better. West to the mountains agricultural prospects are of the brightest, and some say for 200, others for 500 miles, north of Edmonton, the whole country will some day lend itself to great farming development. The excursionists were certainly impressed with the bright prospects of Edmonton's future.

Edmonton to-day owns all its public utilities. Like Strathcona it has coal right at its doors. Valuation for assessment purposes is made on land only, and the rate of taxation for 1905 was 16 mills. It has a population of



A Snap Shot of Mr. W. K. George.

11,534. After these and a great many other facts had been explained to the Excursionists they were driven into the valley below the town, past the old Hudson Bay Fort, which has since been selected as a site for the new Alberta Parliament Buildings, to the golf grounds where the ladies of the Club entertained to afternoon tea.

In the evening a most successful and elaborate reception was held in the skating rink. The building was most profusely decorated with bunting, flags, furs, etc. One half of the rink was arranged for the purpose of speech-making and sitting-out purposes, and was furnished accordingly. The other half of the rink, if the younger members of the party are to be believed, had a floor that could not be improved upon for dancing, and until late at night a full orchestra held forth. The ladies of Edmonton were most kind in their attentions, and they were indefatigable in seeing that everyone had a good time. Many old friends met and everyone made new friends. Mayor May expressed his pleasure at having the manufacturers in Edmonton, and the thanks of the party were returned by President Cockshutt and Mr. R. J. Younge.

The Canadian Northern.

Up to the time of leaving Edmonton, the party had been traveling with the Canadian Pacific Railway. The train was a heavy one, having in all 13 coaches. It was no easy matter for the railway company to handle such a train and run on schedule time, and it was necessary to do this in order to keep appointments along the line. The C. P. R. certainly deserve credit for always being ready with the right kind of equipment. They successfully looked after the important part of the programme that fell to their share.

It would not be fair to compare the Canadian Northern, which the party traveled on from Edmonton to Winnipeg, with the Canadian Pacific, for some of the Canadian Northern rails have only been down one year. The object of the Canadian Northern in having the party go over their line was to show them the great country that they have opened up, and it was evident to the passengers that the lands traversed by the railway were excellent. As to the comforts enjoyed by the individual passengers for the first 150 miles out of Edmonton, it would be advisable to say little. The party was in good spirits, and although some unfortunate delays were experienced, no inconvenience was felt until an accident happened to one of the dining cars at Lloydminster, and it had to be left behind.

In spite of the rough ride everyone was pleased with their trip over the Northern. Hereafter one will not know the West until he sees the magnificent country that it has opened up. It was most interesting to observe every few miles along the track a new town. Sometimes one building, again two or three, and when it reached a dozen it was getting to be a place of considerable importance. When a town reached a population of 1,500 its future greatness was assured. All of these places cannot become large centres, but, no doubt, each of them has a wonderful country at its doors, and the country will, in the next few years, attract settlers by the hundreds of thousands.

North Battleford and Saskatoon.

Only two scheduled stops were made between Edmonton and Winnipeg. The first was between 12.30 and 2.30 a.m., Monday, October 1st, and the second from 7.30 to 9.00 a.m. the same morning. To fill engagements at these unreasonable hours was rather trying. The novelty of the midnight reception was thoroughly enjoyed, and the curiosity of the party to see Saskatoon, which has been so well advertised had everyone astir early in the morning.

At North Battleford, Mayor Chisholm, supported by quite a number of residents of the new town, met the train. As it was such an unseemly hour they did not inflict any formal address on the members of the party. They took a more effective way of putting the views of North Battleford before the passengers, and the address that would have been delivered had it been daylight was neatly printed and copies provided for each member. Mayor Chisholm, in a few words, welcomed the excursionists. His remarks about his own town and the country around were very conservative. His sentiments when he urged the necessity for agricultural and industrial development to work along hand in hand were warmly applauded, and he made it clear to the party that when the population of North Battleford and towns around would warrant the establishment of industries, the advantages of North Battleford should not be overlooked.

At Saskatoon Commissioner James Weir, of the Board of Trade, was on hand with carriages to drive the party around town. It was too early in the morning to do much

other than to see how beautifully the town was located, and to observe the large and substantial buildings which were being erected. As a souvenir of the visit the Board of Trade had prepared a neat folder containing two photographs of Saskatoon, one taken in 1903, the other taken in 1906. It would be impossible to pick the 1903 town out of the 1906 photograph. In consisted, in all, of about fifty buildings, and apparently all of the fifty have given way to substantial brick structures. Saskatoon people call their city the "Baby of the West." It will not be long before another name will have to be found.

Back to Winnipeg.

The party were half a day late in arriving at Winnipeg. It was impossible to make a shorter stop there than six hours, as many passengers had appointments and business to settle up. It was unfortunate that the party was late, for it was necessary to cancel an appointment with Kenora. The Executive were much disappointed that this was the case, as the excursion train three years ago were unable to keep their engagement with that town.

At Winnipeg the passengers of Car 8, familiarly known as the Winnipeg Car, were left behind. The passengers in this Western car had been very carefully held in check by their leader, Mr. Edward L. Drewry, but everywhere the party went Winnipeg was in evidence. It was certainly a great sign of Winnipeg's development when, out of a city which a few years ago was not apparently interested in manufacturing, a full carload went West to examine into the prospects between their good city and the Coast. Everyone was sorry to leave the Winnipeg passengers behind. It was really the breaking up of the family. The passengers from East and West all hoped that they would come together again, possibly for a similar purpose, in the near future.

Port Arthur and Fort William.

It would be impossible to describe the next visit of the excursionists as a visit to the Twin Cities, because, whatever the opinion might be as to how Port Arthur and Fort William should act toward each other, they hardly as yet behave like twins. They do, however, constitute the Liverpool of the Great Lakes. Each of them has a magnificent harbor. Through them the products of the Great West will pass for years to come, and at their docks ships from the East will unload their tons and tons of merchandise. With the development East and West these towns will increase in importance. They are both growing, and growing rapidly. The race is so keen that the increase in population will be on the side of Fort William one week and on the side of Port Arthur the next. The cities were equally cordial in welcoming the visitors. We were shown the river and harbor, with their commercial possibilities, at Fort William in the morning, and the harbor of Port Arthur in the afternoon. At 1.30 we were entertained to a banquet in the Avenue Hotel as guests of Fort William, and at five o'clock the party sat down to another banquet at Port Arthur.

The development was remarkable. The terminal facilities of the Canadian Pacific, Canadian Northern, and the Grand Trunk Pacific are alone going to make large centres out of these towns. To the casual observer the elevators and the large coal-handling plants were evidences of what is being done in the Great West, and the present and future needs of the railways and ships now centring at these points; but to the hard-headed manufacturer it was such things as the blast furnace and the proposed shop for manufacturing car wheels, with the sites marked out for future enterprises, that were looked on as the most promising features for future greatness.

Kakabeka Falls Power.

The excursion party was highly complimented when Mr. Cockshutt was asked to turn on the power from Kakabeka Falls, which for the future will supply Fort William with electrical energy. The advent of cheap electric power means that one of the greatest detriments to manufacturing, viz., the high price of coal, has been eliminated. Five minutes after President Cockshutt pressed the button, badges celebrating the occasion, and printed at the door of the banquet hall by power generated at the Falls, were distributed. A very creditable industrial number of the Fort William "Times Journal" also made its appearance.

Municipal Enterprise.

Port Arthur has been known for a long time for a number of reasons, one of them because it owns its own telephone system, and was not afraid to assert its right to use the system for the benefit of the citizens against all comers. The President of the Board of Trade explained how Port Arthur owned all its public utilities, which includes a good street car service, which connects the town with Fort William. These utilities have always been well



Mr. and Mrs. Denis Murphy, who contributed much to the enjoyment of the trip.

and carefully managed, as a result of which the taxes in Port Arthur are exceptionally low.

This was the last official call. The trip to the starting points, Toronto and Montreal, was employed to the best advantage possible by smokers, afternoon teas, etc., and on Friday, October 5th, the great Western excursion, 1906, was a thing of the past.

Western Sentiment.

The towns and cities of the West, one and all, seemed to thoroughly appreciate the necessity for factories. Winnipeg probably takes the lead. In no city in Canada are there larger and more substantial warehouses, but the citizens recognize that if Winnipeg is going to be a large and populous centre it must have factories. There is no doubt but that the public sentiment of Winnipeg has been, up till recently, dictated by the men controlling the very important wholesale and jobbing interests. These men and these interests have done a great deal for Winnipeg, but Winnipeg has got to such a size now that it is generally admitted that its future greatness depends to a very large extent rather on the number of goods that are manufactured within its gates than on the increased amount imported solely for distribution.

The general Western sentiment was very well put by Mayor Chisholm at North Battleford when he said: "We recognize the truth that, in order to become a nation in the true sense of the word, Canada must not only have developed her rich agricultural resources, her mines, her forests and her fisheries, but she must also have manufacturing industries established to assist in this development, and to provide employment for her own artisans. This alone will make her a truly self-supporting nation, with work and opportunity for all her people. The vast natural resources of our country need only the necessary men, industries, and capital, to make Canada second to none in the agricultural, commercial and industrial race."

The Need for Cheap Power.

With the advent of electric power one of the greatest obstacles to manufacturing will be done away with. Coal for manufacturing purposes in Winnipeg and in the towns of the Middle West is an impossibility. Until the Red River supplies power to Winnipeg it will be very difficult for large plants to locate there. Port Arthur and Fort William have already got around this difficulty. Medicine Hat has its natural gas. Calgary has water power near at hand and coal within 60 or 70 miles. The city of Edmonton is practically built on a coal mine. Victoria and Vancouver have large supplies of coal at reasonable prices. This shows that lack of power will not long prevent the establishment of factories. Other towns may be as favorably situated, but those mentioned serve as examples.

Population Before Factories.

Another great need of the West has been the lack of population near to any point where a factory might desire to locate. The one great object in a factory locating west of the Great Lakes would be to get in closer touch with the consuming centre. Until very recently the population in the West would not warrant any large expenditure. It is probably even yet too soon for many localities to expect the establishment of industries. No doubt for certain classes of industry the time has come, but for others the population will not be sufficient for a few years.

The Labor Problem.

The manufacturers in Eastern Canada have been for a long time in urgent need of more trained artisans. Some time ago the members of the Association reported a shortage of over 6,000 in their factories. This number took no account of the large number wanted on the farms, railroad construction work and for other purposes. The Canadian Manufacturers' Association have not been in accord with the immigration policy of the Dominion Government, which virtually instructs its agents not to encourage skilled artisans to come to Canada. The folly of this is apparent to everyone who looks for the all-round development of our country. The manufacturers in the East feel that they are getting the worst of the immigration policy of the Dominion Government. Whether this is the case or not, it is a fact that people are not coming to the towns and cities of the East or of the West fast enough.

In almost every place was heard the cry for more men. If the manufacturer cannot get the skilled man that he wishes he has to take a man and train him. The result is that hundreds—yes, thousands—of emigrants who have come to Canada, particularly from Europe, to work on the farms of Ontario and the West, have been induced by manufacturers to go into the factories. Of course, every man of this stamp taken to the factory keeps one man from the farm. Our immigration policy results, as far as this man is concerned, in the manufacturer not getting a skilled mechanic and the farmer getting nothing. The farmer and the manufacturer might well join hands to have the actual labor requirements of the country advertised abroad, rather than the sole requirements of the farm.

Probably the greatest shortage in labor is being experienced in British Columbia. The Chinese Exclusion Act has worked most effectively. As a consequence the lumber mills find it quite impossible to secure the men they require. So also with other industries. On the streets of Vancouver a large number of Hindoos, a new importation, were seen. They are men of a more powerful physique than the Chinamen, and are reported to be good workmen. The advisability of continuing the Chinese Exclusion Act is doubted by many in British Columbia who previously favored the measure. The labor problem on the Coast is a serious one. The great natural resources of the Province cannot be developed unless men are available, and the present price of wages will prevent certain classes of work being undertaken.

The Prosperous East.

It has been a common practice among Western Canadians to take it for granted that those living in Ontario and the Eastern Provinces are more or less ignorant about the West and its great possibilities. No doubt this is the case. It would be necessary for a person to visit Western Canada every year in order to keep in touch with its great development. The Western Canadian, however, must not forget that Eastern Canada is probably experiencing an era of prosperity just as remarkable as that which is going on in the West. It is not so noticeable, because the country has been settled for a long time. The prosperity in the East is more or less due to the development in the West, but the farmer or merchant who left Eastern Canada five or six years ago, for the West, would be very much surprised to find the remarkable change that has taken place in the East.

From West to East.

The Canadian Manufacturers' Association have, for several years, been organizing excursions for the purpose of extending business, and also for the higher purpose of making Canadians familiar with their great country, and creating and unifying a great national spirit. In this the Association have been remarkably successful. What the Association would now like to see would be excursions of the business men of British Columbia, Alberta, Saskatchewan and Manitoba come and see what is going on in the East, visit the factories and see the cities. Any enterprising Board of Trade or commercial organization which will arrange such an excursion, may rest assured that its efforts will be ably seconded by the business men of the Eastern Provinces, and the cities and towns that they can officially visit will welcome them with open arms.

Lack of knowledge of specific facts about Canada is a weakness of most citizens. A booklet has been just issued by Gourlay, Winter & Leeming, which is a mine of information in this regard. It contains a thousand facts about the country, compiled by Frank Yeigh. They are put in concise, crisp sentences, and cover the field of size, population, mineral resources, etc. The booklet is artistically printed and illustrated, and contains in addition to the facts referred to a series of fine cuts, with descriptions, of the pianos manufactured by Gourlay, Winter & Leeming. By sending eight cents in stamps anyone can get a copy.

Good Fire Protection and Good Fire Insurance---How to Help Them Along.

By A. M. LEWIS in "American Industries."

FEW manufacturers stop to consider when building a plant, the advantages of fire protection, first as a means of preventing destruction of the plant and the consequent loss of business, which cannot be covered by insurance, and second, the reduction in cost of insurance; although experience has proven that the greatest loss to an established business is the loss of trade which follows a fire that interrupts or decreases the daily production of a plant and forces customers, who have been secured at great cost, to go to competitors with their orders, while your plant is disabled.

The greatest asset of any manufacturing business is a ledger record of satisfied and steady customers, and how disheartening it is to your salesmen or branch houses to have to send their old and reliable customers to some competitor because of your inability to produce what is required. The record of business fails to show to any of us that a fire of any character is beneficial, but it does show the wreck of many established and profit producing enterprises that have lost their customers and disorganized their own forces after a destructive fire.

These losses must be classed as indeterminate, and cannot be insured; but they can be prevented by applying the same business methods to fire protection as are applied to other branches of your business.

Almost every manufacturing plant is composed of separate and distinct departments each dependent upon the other in producing the finished article, and the whole dependent upon the primary source of power for successful results. It is therefore most essential that every department of a plant be thoroughly protected against disablement by fire, and in protecting each department you protect the whole.

Systems of Prevention.

The most advanced form of fire protection is secured by the use of the automatic sprinkler system, which consists of a series of pipes arranged, usually on the ceilings, with automatic sprinklers placed at proper distances; the whole system supplied by a gravity tank on a suitable structure placed on the ground or above the roof of the highest building, and a secondary source of supply, such as a fire pump, steamer connection, or connection to city water mains, if pressure is sufficient; and in large plants all the above sources of supply are sometimes used.

The sprinkler consists of a bronze frame, threaded for attachment to the pipe system, containing a water outlet, and opposite thereto a stationary deflector. The water outlet is kept perfectly closed by a bronze cap, retained by two levers whose ends are in turn secured by a fusible link, consisting of two bronze plates transversely corrugated and soldered together.

The operation can be readily understood from the following:

As soon as the air about any sprinkler head, by reason of combustion, reaches a given temperature—usually 165 degrees Fahrenheit—the solder link in the head melts apart. Thereupon the valve cap which closes the outlet end of the water supply pipe is released. Water then pours through this opening against the distributor, and is spread over the ceiling and floor of the building.

The cost of such a system depends entirely upon the construction of the buildings, the location, and the character of insurance desired; but the insurance interests allow such substantial reductions in cost of insurance for the installation of an automatic sprinkler system, that is usually pays for itself in a few years, and during that time and afterwards, you have the benefit of the fire protection.

How Insurance is Cheapened.

Every recognized company engaged in the sprinkler business will furnish estimates on your property, and when interested write to your insurance broker or to the sprinkler companies direct and state what insurance is carried and the companies carrying the same, and request that estimates be furnished on a complete sprinkler system. Then ascertain what reduction will be given you by the insurance companies if the system is installed, and you can then determine the saving to be effected and the length of tim required for the system to pay for itself. First conside the advantages of fire protection, then the saving in the cost of insurance; and if you give this subject the same careful thought you have given your business in general to make it a success, you will realize the advantages of fire protection and get in line with the best and most successful of the American manufacturers.

The relationship of fire protection to fire insurance is as smoke to fire—one is the direct result of the other; but the fundamental basis of fire insurance has been misunderstood by the public in general, and especially by the manufacturers conducting an established and profitable business depending upon the daily operation and producton of a manufacturing plant to maintain a profit-producing business.

In determining the selling price of any article there must be a basis of cost, and to that is added the expense of marketing and the profit desired. The cost of insurance is determined on the same basis. It is therefore evident that the less loss the insurance interests suffer the less will be the cost of insurance to the property owner; and it is further evident that as the cost of insurance is based on the loss suffered, every manufacturer and property owner should be interested in reducing fire loss, and in so doing reduce the cost of insurance to each and every individual.

Lessons from Conflagrations.

The recent conflagration in San Francisco and the enormous losses experienced by the insurance interests and property owners best illustrates the absolute dependence of each individual on the other; for is it not a well known fact at this time that the cost of insurance is being increased throughout the world to enable the insurance interests to recover the losses suffered in San Francisco and to increase their surplus, so that if called upon to pay further heavy losses in the future they can do so without impairing their capital? Was it not a fact that after the fires in Baltimore, Md., and Toronto, Canada, the insurance interests increased their rates to recover those losses, and some of those manufacturers that suffered losses in these cities were not reimbursed to the full extent of their losses because some of the insurance companies suffered so badly that their available assets were not sufficient to repay all losses experienced?

Reviewing the experience of all large conflagrations, it must be evident that it is the assured after all, and not the insurance companies alone, that suffer; and is it not therefore both necessary and advisable that all manufacturers assist in reducing the fire loss and thereby reduce the cost of insurance?

Considering the relationship between the insurance interests and the assured, it is reasonable to expect that they work in harmony, advancing the interests of all concerned; but how many manufacturers and property owners consider it necessary or proper to consult insurance authorities when building a plant or making improvements,—very few, indeed, in the years of my experience; and yet if the proper authorities were consulted they could suggest the economical arrangement of buildings, apparatus, and general systems based on years of experience, that would be infinitely valuable.

Building Materials Tested.

The underwriters of the United States and Canada have for some time at great expense maintained experienced engineers and chemists in charge of well equipped laboratories and testing stations, for the sole purpose of examining and testing appliances of every character used in buildings, including those for fire protection. The American manufacturer has therefore been securing, without expense to himself, the results of patient labor on the part of insurance interests; and how few realize in erecting new buildings or rearranging old, that the materials entering into the construction of the same have been tested with a view of preventing the use of any that are inferior and objectionable.

An insurance organization can be conducted along lines similar to any large business, and it is not compulsory that these laboratories and testing stations be maintained; therefore, if the insurance interests are sufficiently interested in your welfare to devote their time and money to the protection of your interests and to the reduction of the cost of insurance to you, is it not proper that you assist in this broad work by protecting your own property and that of your neighbor; more especially when the ultimate result will be a considerable saving to you, and the satisfaction of knowing that your investment is safe and you are afforded a protection from the greatest destructive element of the universe?

Efforts of Insurance Companies.

You read in the daily papers that an ordinance has been passed by your city authorities, prohibiting the storage of explosives in the city because of the danger to life and property, but did you ever consider that back of that ordinance are the ever alert insurance interests, protecting your family and property?

In New York City an ordinance compels the protecting of basements in certain classes of buildings and sections of the city, primarily to prevent conflagrations starting from small fires in congested sections; and have you considered that the insurance interests suggested such an ordinance for your protection as well as their own? You will further find in some cities that high pressure water systems are being installed to be used for fighting fire alone; and has it occurred to you that this prevents the crippling of the city water supply in addition to affording an instant supply of water to assist in preventing a conflagration, and thus protecting your home and family from the dangers of a water famine, and your property from destruction should a large fire occur,—and that the insurance interests are responsible for these systems being installed?

All these facts show that the insurance interests are alive to your welfare, and certainly the American manufacturer should be sufficiently interested to assist those engaged in this wonderful work. Therefore

1: When erecting a building or plant, use only the best of fire-resisting materials and consult the proper authorities about the general arrangement of your buildings or plant.

2: Protect your property from fire by using modern and approved appliances.

3: Be interested in the efforts of the municipal authorities to secure effective legislation in favor of fire prevention.

Interesting yourselves in the above subjects will secure the commendation of your fellow men and in addition you will derive the direct benefit of the lowest possible insurance rate and reduce an item of expense which must surely increase unless there are radical changes in present methods.

THE GERMAN WORKMAN.

AT times workingmen, through their unions and otherwise, make suggestions for legislative and other reform. The movement is growing. Sometimes the suggestions are laughed at, sometimes they are roughly handled as being harmful to all concerned, as many certainly have been. But if workmen are left to look out for themselves what else can be expected? Employers of all kinds and numbers of professional classes have opportunities of knowing the world and its ways, and of considering consequences. If they fail to tell their views and give the result of their judgments to legislators and others, what can the employee do but advance his own plans, immature as they may be, in lack of something better.

It is well for us to ask ourselves if we are doing what we can for the workingman—doing what we ought to do in our own and in society's interest? The problem of social comfort and ease of mind is pressing. It is felt in the attitude of labor and capital, in political programmes, in municipal by-laws, everywhere it is in evidence.

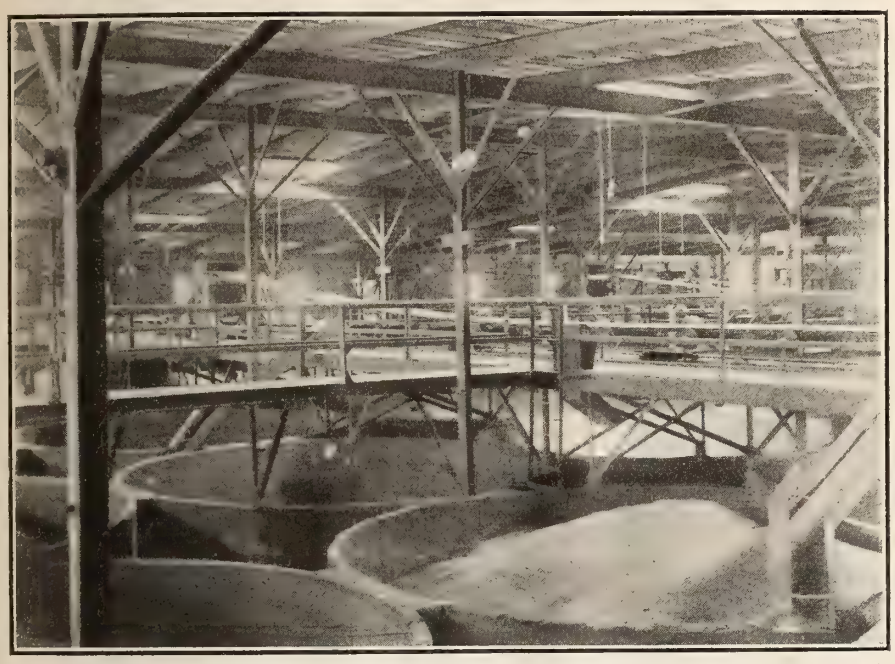
A volume just published by P. S. King & Son, of London, from the pen of Mr. W. H. Dawson, "The German Workman: A Study of National Efficiency," brings the whole question home. The example set by the Fatherland is portrayed in eloquent colors. We are told of the labor registries; of insurance against worthlessness; of labor colonies; of the great movement to provide houses for workmen, which is an almost universal problem; of the anti-consumption crusade; of municipal powershops; of industrial courts of arbitration; of efficient statistical bureaus, etc.

This much may be taken to heart: if our society is to be protected against harmful unrest and rash legislative proposals, the favored leaders of society must show their hand, and must head off such tendencies by sympathetic, broadminded activity. The volume just cited might be consulted in this connection with advantage.

Some manufacturers have, of course, done a great deal. All honor to them. They have instituted wage bonuses, profit-sharing experiments, supported the anti-consumption movement, advocated improved technical educational facilities, supported Y.M.C.A. and other like organizations, and struggled to advance our national industries, which is the great aim of every Canadian patriot. But if manufacturers and other leaders of Canadian thought would take up the volume referred to and consider the possibilities of improving the relations between them and the great class of manual laborers, much good might result. After all, we have only made a beginning in Canada, and, while older countries have more difficult conditions to eradicate, ours are serious enough not to be allowed to grow worse.

THE MODERN GRAIN ELEVATOR.

THE great elevators of Canada, with their wonderful facilities for handling grain, are one outcome of our Western development. The vast tracts to the west of Lake Superior, but a comparatively few years ago given up to the fur trader and hunter, have become fertile agricultural lands. The courage and optimism of the early settlers is a subject for national pride.



Two Storage Tanks from above, showing one of the Tanks full of grain.

Many years were spent in pioneer work, wrestling success from the midst of difficulties. At first with few transportation facilities, with miles of wilderness between settlers, by indomitable courage, the first comers made their land to bear fruit and year by year the sphere of their labors extended, ever pressing back the empire of frost, till now the wheat belt extends into the very heart of the North, and the Peace River country, formerly given over to the fur trade alone, now grows golden with the ripening grain. The taming of the wilderness, the bringing of prairie under cultivation, the growing and harvesting of the crops, are the success and satisfaction of the farmer.

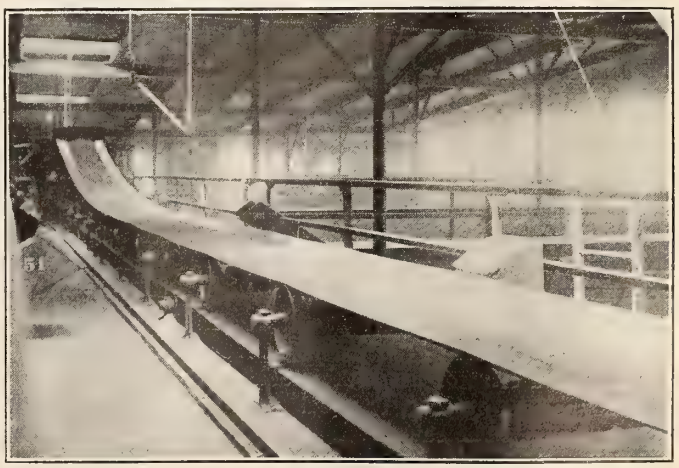
For those earlier efforts no giant elevators were required. Each farmer with his little land under cultivation, found small difficulty in providing for his harvest. A change has come. The thousands of settlers have grown to hundreds of thousands; the thousands of acres under cultivation have increased to millions; and the harvest in wheat alone has exceeded 90,000,000 bushels during each of the past two years.

The advance in methods, to keep pace with the growing agricultural operations, would form an interesting chapter in the history of the West. Harvesting now is reduced to a mechanical science. Operation after operation has been added to individual machines, and shortness of farm help has resulted in mechanical invention to replace human toil. Before the modern self-binder, the ripened grain falls into golden sheaves. Another operation and the wheat is separated from the straw. All this is done so rapidly and the total amount is so great that the handling of the grain becomes a mighty problem. To get it to the lake ports and into boats so that it may be shipped by water before navigation closes is the problem to be worked out. It is in this work that the grain elevators are all-important.

The Elevators of Port Arthur.

When the vessels that ply the inland seas, round Thunder Cape and thence pass from Lake Superior into Thunder Bay, the first welcome sight that catches the eye of the traveler is the city of Port Arthur as it nestles on the side of a hill. As the vessel rapidly approaches the great Canadian lakeport where rail and sail meet, the attention of the voyager is attracted by the mammoth Canadian Northern elevators that loom up against the background of residences. These elevators have attained a world-wide reputation as being the largest, fastest and most modern grain buildings in the world.

The elevator plant is the first glimpse that a traveler gets of the great West, and he is impressed not only with the magnitude of the buildings, but with the great Canadian country that necessitates such a magnificent grain handling plant. The Canadian Northern elevators form a portion of the spout through which the crops of the Canadian North-



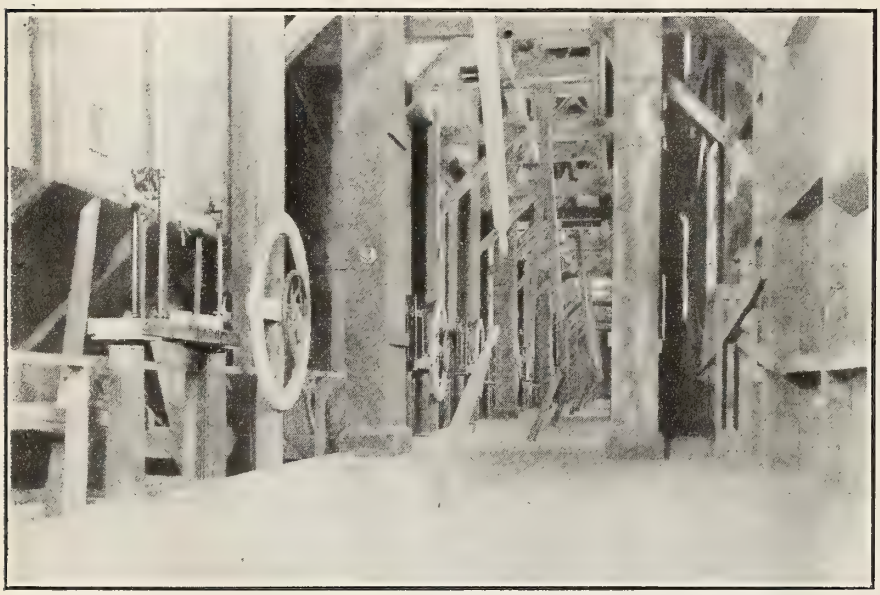
One of 27 "Conveyors" in Operation.

West are conveyed to the markets of the world. At the head of the lakes is the shipping port for the millions of bushels of grain that are harvested in the West, and the Canadian

Northern elevators stand as a monument to the progress of the western portion of the Canadian Dominion.

The erection of the Canadian Northern elevators was commenced in June, in the year 1901, the contract being let to J. A. Jamieson, an elevator builder of Montreal. The work was completed and the first grain from the West was elevated into the building the following year, and Port Arthur once more became a shipping port on the Canadian lakes.

In 1903 the second series of elevators were commenced, the contract for the work being let to the firm of Barnett & Record, elevator builders of Minneapolis. These were completed in 1904, and S. B. Hanna, third vice-president, presided over the opening. In point of equipment and for rapid and economical handling of grain, the C.N.R. plant at Port Arthur is without an equal on the American continent.



"Scale" Floor in Elevator A, showing ten 40 ton Scales, with dials for Setting Spouts.

Working Houses and Tanks.

The elevator plant consists of two working houses and two storage plants, that cover in the neighborhood of ten acres of ground. The buildings are higher than many sky-scrapers; they are over 100 feet from the waters' edge. The combined storage capacity of the plant is 7,000,000 bushels. The plants are so constructed that they may be worked separately or in conjunction with one another.

The two working-houses are constructed entirely of wood, while the storage tanks are built of hollow tile, reinforced by steel bands and imbedded in concrete. They are circular in form, 21 feet in diameter, and 85 feet deep. They are arranged in clusters of 80, the interstices also being used.

No other elevators have as yet attained the speed for the unloading of cars or the loading of vessels than the Canadian Northern elevator has. The unloading capacity of the elevator is 500 cars per day, or equal to half a million bushels every 24 hours. The shipping capacity of the plant is 200,000 bushels per hour, the cleaning capacity 24,000 bushels per hour, the drying capacity 1,000 bushels, and the screening 3,000 bushels.

When the grain arrives in the yards it is shunted down the unloading tracks to either of the two working-houses. The tracks have a capacity of 15 cars each. Five cars are brought forward on the tracks, alternately, and are unloaded into the hopper by means of a Clark Automatic shovel, the unloading capacity of each building being 12 to 15 cars per hour, or a combined total for both buildings of from 250 to 300 cars in 10 hours. The unloading of the cars interferes in no way with the shipping.

Progress of Grain.

After the grain is unloaded into the hopper it is conveyed to the top of the building by a system of endless buckets, and it is then carried to the scales where it is weighed. After this it is conveyed to the different bins, in the working-houses, or it is taken from the weighing scales by an endless rubber conveyor belt, 36 inches wide, to the tanks. There are five of these belts running from each shipping building and each has a capacity of 16,000 bushels per hour. Each belt is provided with a self-propelling tripper for deflecting the grain into the compartments desired. In order to empty these tanks there are five smaller conveyors provided in the tunnels below the bottom of the buildings. These have a capacity of 50,000 bushels per hour.

Power Plant.

There is a separate power plant for each working-house. Elevator A, consists of one Wheelock engine 24 x 50, with independent jet condensor, and is capable of developing 650-h.p.; one Ideal generator 9 x 10 for lighting purposes, also one Northey Duplex Fire Underwriters' Pump, 18 x 10 x 12, with a capacity of 1,000 gallons per minute. A battery of three boilers is provided, capable of carrying 125 lbs. of steam.

The management of these elevators rests with Mr. Harry Sellers, with Mr. Jos. Seddon as his first assistant. None but a man brought up in the business could handle the enormous detail of such complex plants. The great quantity of grain handled, the speed required in loading and unloading, the constant need for inspection, all these make the exercise of watchfulness and judgment a necessity. The high record for grain handling is held by the Port Arthur elevators, since they placed 127,000 bushels of wheat in the Steamer Wilson, in one hour and a quarter. The unloading capacity of the plant is 600 cars in 24 hours. The Canadian Northern Railway Company's elevators have been recently leased to the British American Elevator Company.



The Elevators from the Bay.

ADVERTISING CANADIAN INDUSTRIES

By J. ANGUS MacDONALD

Author "Successful Advertising—How to Accomplish It."

Outlining an Advertising Campaign

"How can I best advertise my products before the greatest number of possible customers?" is the first and always the leading question before the manufacturer essaying publicity. The answer depends upon conditions.

One advertiser may use the entire list of mediums—newspapers, magazines, trade papers, street cars, novelties, out-door advertising, as well as seek publicity directly through the mails. Another may confine himself to sending literature through the mails.

As each concern must "hew its own road," in a business way, so must it hew its own advertising path. Conditions surrounding each business are peculiarly its own. No two concerns have exactly the same style and method of advertising. What may be a big success for one manufacturer would prove a huge failure to another. Therefore, an individual style and method of advertising must be studied out to exactly fit each business.

At the very commencement of an advertising campaign the manufacturer should call in expert advertising advice. This may come from the specialist, who has, by past performances, demonstrated his ability to successfully cope with such problems. Practical, unbiased advice at this stage is most valuable. This advice, mind you, should, above all, be practical—it should be based upon first hand, personal knowledge of the workings of similar campaigns. Theories, when an advertising campaign is started, are as numerous as microbes. Every intelligent person has some ideas on advertising. These theories may be of exceeding value, but they are questions to be determined at the expense of the advertiser. If the advertiser cares to pay out his cold cash in order to satisfy himself whether advertising theories will be converted into practical propositions or foolish fallacies why that is "his own funeral." He pays the bills. Some successful firms, however, have found it an excellent policy to profit by the past experiments of others under similar conditions.

Said a prominent New York clothier: "I always keep a sharp eye upon my competitors' advertising, and profit by their failures as well as by their successes." There is more in the above sentence than a cursory reading would indicate. Few appreciate the full meaning of the word "failure" until it strikes them in the solar plexus region of the bank account. Then hindsight can see many leagues, and see only vain regrets, whereas if foresight could have seen a few miles, satisfactory results would have been the story.

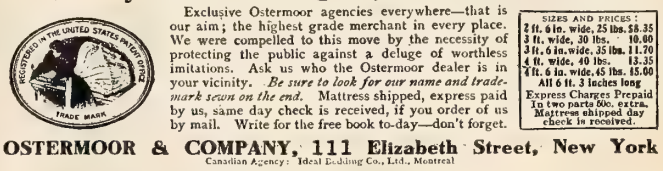
I believe it was Horace Greeley who said: "If our foresight was as good as our hindsight we would be a damned sight better off."

Knowledge of mediums and methods, and the ability to put this knowledge to business use, mean the expert's stock-in-trade. Much study is required at the commencement of an advertising campaign. The business itself receives first consideration. Then the markets and class of customers to whom the goods should appeal. This leads up to methods and mediums, and how much to spend in advertising.

At this point it is well to make a few remarks that experience has demonstrated to be worthy of consideration:—

Advertising expenditures by retailers range from two to ten per cent.—a fair average being three per cent. Advertising outlays by national advertisers of patent medicines, foods and manufactured articles run from two to as high as thirty per cent. Ten per cent. seems to be a fair average. The advertising percentage in the infancy of a business seems to be generally greater than when the business is well established. Scaling down the percentage is, however, not always a wise move. Manufacturers who appear to be the most successful in their lines, and who advertise, keep up the volume of their advertising at high tide. A distinctive style of advertising is usually evolved and adhered to.

The majority of manufacturers market their wares through retailers. As an instance, here is reproduced a portion of a magazine ad of the widely-known Ostermoor mattress:—



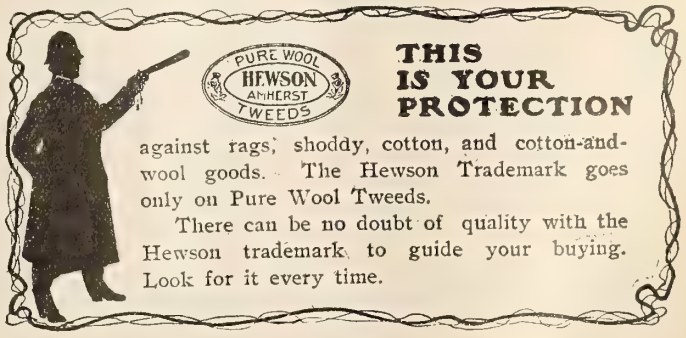
Two thousand merchants handle the Ostermoor mattress. The national advertising given this product creates a national demand, so that selling by each merchant is made easier. The above clipping from "The Cosmopolitan" is one illustration of very many instances where manufacturers aid retailers with widespread advertising in publications.

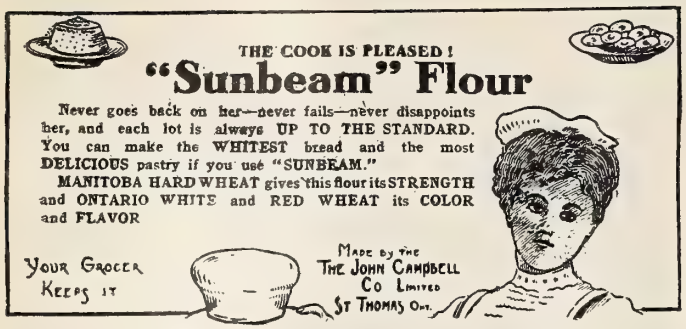
The following Maher & Grosh advertisement from "The Cosmopolitan" shows where goods are offered direct. This



firm does not solicit dealers' trade. An advertisement like the above, which does not aim to solicit or assist the dealer's trade, is the exception, not the rule. It is reproduced, however, to show that such exceptions exist.

The following advertisements of Canadian products were clipped from weekly papers from different sections of Canada. They show that some Canadian manufacturers are fully awake to the advantages of advertising. In each of the following ads the retail merchant as a source of supply for the advertised article is indicated:—







As retail merchants are so necessary to most manufacturers in marketing goods, a few thoughts as to how merchants may be helped in their advertising are here submitted. Certain manufacturers doing business with many merchants have gone so far as to create and establish advertising departments where advertising is produced especially for the retailer's benefit. This advertising takes various forms. It may be electros of cuts and ads. to go in local papers, with the retailer's name at the bottom. It may be a "store paper," furnished monthly or at stated intervals. It may be a series of circulars for "special sales" at designated periods. It may be a booklet, all beautifully written, illustrated and printed, and lacking only the retailer's name and address, which will be supplied under certain conditions. It may be an advertising scheme, worked conjointly by the manufacturer and retailer. In advertising the progressive manufacturer nowadays is more than ready to meet the retailer half way.

The advertising appearing in publications should be reinforced by an abundance of literature to be sent out in response to enquiries, and to aid in clinching sales. This literature, whether catalogues, booklets, "form" letters, "follow-up" letters, circulars, etc., should be prepared before publication advertising is indulged in. Then when such advertising does appear this literature is all ready.

At the commencement of a manufacturer's advertising campaign there is a lot of study required. Then comes a lot of downright hard labor—the writing and compiling of literature and advertisements. Then when the campaign is fairly launched, and the public ear is caught, it must be held by the skilful variation of the advertising tune of goods and prices.

OUR NEW ZEALAND LETTER.

Wellington, 3rd October, 1906.

The reciprocal treaty between Australia and New Zealand has been under consideration of the Commerce Committee for some time. The chairman asked yesterday for the third time for an extension of a week for the completion of the Committee's report to the House. This caused much grumbling, the more so as everyone is convinced that the bill will be thrown out. The treaty is unpopular in Australia as well as in New Zealand.

In the meantime the bill is operative, and on lines affected the higher duty is charged, and, though the difference will be refunded if the bill is rejected, merchants do not care to be out of pocket for such a long time. Apart from this, business in these lines is stagnant for the present.

The principal Canadian lines so affected are the following:—

Items	Proposed Duties		Other Countries		Present Duties	
	Aus.	N.Z.	Aus.	N.Z.	Aus.	N.Z.
Grain, Barley	1/3 Cental	1/6 Cental	2/- Cental	2/- Cental	½d. lb.	2/- Cental
Beans	1/3 "	1/3 "	2/- "	2/- "	1/6 Cental	9d. "
Peas	Ditto	Ditto	Ditto	Ditto	Ditto	2/- "
Oats	1/3 Cental	1/3 Cental	2/- Cental	2/- Cental	1/6 Cental	9d. "
Flour	Free	Free	2/6 "	1/- "	2/6 "	1/- "
Wheat	1/- Cental	9d. Cental	2/- "	2/- "	1/6 "	9d. "
Oats	½d. lb.	1/- "	1½d. lb.	1½d. lb.	.....	.....
Soap, perfumed	3d. lb.	25 p.c.	6d. lb.	6d. b.	3d. lb.	25 p.c.
Timber, sawn, undressed	.....	2/- 100	.....	3/- 100	1/- 100	2/- 100
Timber, sawn, dressed	3/- 100	4/- 100	4/- 100	5/- 100	3/- 100	4/- 100

If the treaty should be ratified Canada would certainly lose some of her business with these colonies, but as the bill evidently is doomed it is needless to worry about it.

The Canadian section of the Christchurch Exhibition is progressing very satisfactorily, and shortly everything will be ready to receive the exhibits, and to put them in place. Unfortunately the "Pondo," which steamer has the bulk of the exhibits on board, has been delayed at Vancouver, and sailed only on the 23rd instant. She cannot, therefore, be expected at Lyttleton before the 20th October. Taking into consideration the congestion of traffic, which is bound to occur on the single line track, and through a tunnel of a mile and a half between Lyttleton and Christchurch, the cargo cannot be expected to arrive on the Exhibition grounds before the 25th October, which leaves Mr. Burns about a week to unpack and put things right. Though Mr. Burns and his assistants are very energetic, I fear this task will be too much for them. It is a great pity, as, so far, Canada has been the first, and has been held up as an example to other countries.

The only satisfaction about the delay of the "Pondo" is that she is a "full" ship. Let us hope that this will be the case with all the following steamers, and if the exports from this side increase in proportion the line soon will be on a paying basis, and justify the subsidy granted by the two Governments.

Mr. Race, the second Canadian Commissioner, has also arrived on the scene, but I have as yet not had the pleasure of meeting him, but hope to do so in a week or two.

Business is very good right through the colony, and, as there are no clouds visible to bring about a change for the worse, people are buoyant and enterprising.

COSMOPOLITAN.

THE NEW PRESIDENT

Mr. Harry Cockshutt, who has been elected to fill the important position of President of the Canadian Manufacturers' Association for 1906-1907 was born in the city of Brantford in 1868, and has lived there all his life. He received his education at the public school and Collegiate Institute in that city, but while a boy served his apprenticeship in the workshops of the Cockshutt Plow Co. He later travelled in the interest of the Company and in 1888, at the age of twenty, was appointed Treasurer; in 1891, Secretary-Treasurer, and in 1893, Managing Director, which position he still occupies.

Mr. Cockshutt has travelled extensively both on business and pleasure. He is familiar with all parts of Europe,



MR. HARRY COCKSHUTT

and has had two business trips for his Company which have taken him around the world.

The Cockshutt Plow Company is one of the largest and oldest institutions in Brantford, and it has only recently moved into a new and modern factory. The Company, which is a family affair, has branches all over Canada, and in a number of foreign centres.

Mr. Cockshutt is a director of the Ontario Portland Cement Co., Brantford, and of the Brantford Oakland Roads Co., and is interested in several manufacturing concerns.

In spite of his many business responsibilities he has found time to give considerable attention to public service. In 1893 he was elected public school trustee for the city of Brantford, on which Board he served two years. Later he became President of the Brantford Board of Trade. In 1898 he was elected alderman for the city of Brantford, and acted as chairman of the Finance Committee. In 1899 he was elected Mayor by the largest majority that the city ever gave.

During the last few years Mr. Cockshutt has been active in the work of the Canadian Manufacturers' Association. In 1903-1904 he was Chairman of the Railway and Transportation Committee, for the year 1904-1905, First Vice-President, and now steps up to the Presidency. During all these years Mr. Cockshutt has been an active member of the Association's Executive Council.

Efficiency of Service.

Every time you take a step which makes it easier for a workman to perform his task you have added to the efficiency of your force. That workman will turn out more or better work. The trouble is, the average manufacturer does not see it because it cannot be shown him in actual figures. It ought to be shown in this way, and it will be if the plans outlined in previous articles are followed; but in any case the effect is there just the same. Perhaps it is not possible to hire none but efficient workers, but it is possible to tell soon after they go to work whether they are efficient or not. As it is now the man who is once taken on is pretty likely to stay there unless his work is very rank, indeed. If he is just passable he is let alone, and what is the result? He not only turns out poorer work than he should, or less of it, but he causes a falling off in the work or the output of the other workmen with whom he is associated. It is the tendency of the men in a gang to time themselves by the speed of the slowest one instead of the briskest, and because of this an inefficient workman is a source of loss. Weed out the poor ones as fast as possible. Often the circumstances are such that it must be done diplomatically, but it can be done just the same. Of course, a better plan is not to hire the poor ones, and to this end a try out is advisable where it is possible. If an investigation is at all within the bounds of possibility let it be made by all means. If none can be made, let the task of hiring the men be entrusted to the man who has the best judgment, and not to the one who chances to need the man at the moment. It will be time well spent, even though the man who does the work be a high-priced man.

A Floating Exhibition.

British efforts to hold their own in the colonial markets are not going to cease with the sending of a commission to Canada to study the conditions to be encountered here by British manufacturers. A unique exhibition is being prepared at London, which, it is hoped, will bring much business to English factories. An ordinary freight vessel is being refitted under the direction of a syndicate of manufacturers. Stalls, similar to the show room spaces of industrial exhibitions on land, are being set up, and the whole vessel is being so arranged that manufactured articles may be exhibited to the best advantage.

This floating exhibition will be sent in a few weeks to Montreal, and a number of other Canadian ports. After that it will go to the West Indies, Cuba, Australia, Japan, and a number of other countries. It will stop at Montreal for a number of days to let merchants and buyers visit it. While it remains in a port it will be open like an ordinary exhibition, though during certain hours it will be reserved specially for buyers. Experienced representatives of the firms interested will be in charge of the exhibits. The project shows a real determination on the part of British manufacturers, not only to maintain their position as exporters, but to strengthen and extend it.

AMONG THE INDUSTRIES

The Diamond Flint Glass Company, of Hamilton, will double the capacity of their works immediately.

The Massey-Harris Co., Limited, of Toronto, will erect a distributing warehouse at North Battleford, Sask.

The business of the Hogan Shirt and Collar Company, of Berlin, has been sold to a joint stock company, who will erect a large new factory next year.

A biscuit and confectionery manufacturing establishment is proposed for Medicine Hat. Mr. W. H. Doty is bringing a plant from the East, where he has been engaged in similar work.

The Crescent Cement Works at Longue Pointe, Que., have been purchased by American capitalists. They intend to extend the plant by the erection of a large mill, with an initial capacity of 2,000 barrels a day.

The Ontario sales office of the Jenckes Machine Co., Limited, has been moved from the Lawlor Building, Toronto to St. Catharines, Ont., where it will be operated in future in conjunction with the branch works of the company there.

Metropolitan Soaps and Oils, Limited, are manufacturing the goods which were formerly sold in Canada by the Cataract Refining Company, of Buffalo. This is one of the many industries which Canada has secured of late from the United States.

The Automatic Fastener Company has been organized at Fredericton, N.B., with a capital of $150,000. The company will manufacture automatic fasteners for garments, mail-bags, and all garments generally fastened by hook and eye, buttons, etc.

Ganong Bros., St. Stephen, N.B., are building several additions to their plant. By the first of the year they hope to have their present factory doubled, and to add a complete sprinkler system, and new machinery. Their chocolates find their way to all parts of Canada.

Heap's lumber mill in Vancouver was almost completely destroyed by fire recently. The loss is estimated at $200,000, with insurance of $90,000. The lumber industry carried on by the Heaps Co. was very large, and the destruction of the mill will be a serious loss to Vancouver.

The Sydney Boat and Motor Co. has been acquired by Messrs. Jennison, Dahl and Dobson, who are organizing a company to carry on the business. The company has already turned out some excellent motor boats, and there is a large field for the development of business.

At Nanaimo, B.C., a cold storage plant will be erected for the preservation especially of herring as bait in the halibut fisheries. This city has become an important fishing station, and it is felt that a cold storage establishment will fill a real need. The proposed capital is $50,000.

The McClary Manufacturing Co., of London, will erect a new warehouse in that city. The building will be 100 by 250 feet, and will be five stories high. It will be used for storage purposes, and the present storage warehouse will be used for manufacturing purposes.

The Frost & Wood Company, Limited, have issued a folder, giving views of their new plant, which has replaced the one destroyed by fire last spring, and the warehouse and office which they have just completed in Winnipeg. The folder describes the progress of the firm, and is a good piece of advertising literature.

The Commercial Cement Co., Limited, has been incorporated in Winnipeg. The mills will be located on the Boyne River, where a good supply of suitable rock has been secured. Machinery has been ordered which will equip a mill with a capacity of 1,000 barrels per day. The capitalization of the company is $150,000.

The Brantford Starch Works, situated about a mile out of Brantford, suffered a severe loss from fire on October 12th. The main building, a three-storey brick structure, in which is the drying kiln machinery, was entirely destroyed. The stock, however, was saved. The loss is estimated at $35,000, and is fully covered by insurance.

The Canadian Ethinite Company, Limited, of Niagara Falls, Ont., have commenced the construction of extensive factory buildings. The product to be manufactured resembles calcium carbide, and will be the base of an illuminant gas. It is expected, however, that it will be used for industrial purposes in addition to lighting.

The Ames, Holden Co., Limited, have purchased in Montreal a site for a new $200,000 boot and shoe factory to keep pace with their growing trade. This factory will be in addition to their already large plant at Montreal and St. Hyacinthe. The capital of the firm has been increased to $2,500,000. The new factory will be of reinforced concrete construction, and absolutely fireproof.

Brandon has organized a company for the purpose of building a transfer railway which will connect all of the existing railroads operating at that point. This will give added trackage and warehouse facilities, which has been a need there. The Brandon, Saskatchewan and Hudson's Bay Railway (the Hill line) will have their tracks laid into Brandon by the 1st of November and trains running. This gives Brandon a direct southern outlet.

As the result of a prolonged strike of iron moulders in Chicago, experiments have been made with moulding machines, which have turned out very satisfactorily. One hundred machines were installed in various foundries, and they have been shown to turn out as much work each as three skilled moulders. The result has been received with great satisfaction. Orders have been sent in for 500 more for quick shipment, and it is expected with these the industry will resume its normal condition.

The Nichols Chemical Company, of Canada, Limited, with main offices at Montreal, has begun the construction of a plant for the manufacture of sulphuric and other mineral acids on its property at Sulphide, on the main line of the Canadian Pacific Railway, about five miles from Tweed, Ont. The company owns large ore deposits at that place, and, as the acid plant will be at the mouth of the mine, and of the most modern character, it will be particularly well situated to supply users of acids in Ontario. The investment is about $250,000.

Brandram, Henderson, Limited, of Halifax, have decided to establish their lead corroding works in Montreal. Some time ago the City Council of Halifax agreed to pay a bonus to this firm on condition that they would establish a plant in Halifax, and employ at least 75 hands, and have a pay roll of $50,000 annually. This was endorsed by the Halifax Board of Trade, but a hitch occurred in connection with the necessary legislation. The deal accordingly has been called off, and the proposed works will be at once established in Montreal. Messrs Henderson & Potts, paint manufacturers of Halifax, will also erect a branch plant in Montreal.

TRADE ENQUIRIES

NOTE—For further information regarding any enquiry mentioned under this heading or the name of enquirers, apply by number to the Secretary, of Toronto,

76 **Agencies.**—A firm doing business in the interior of **Jamaica,** is desirous of securing the representation of a few reliable Canadian manufacturers on a commission basis.

77 **Melbourne.**—Good openings are reported in **Melbourne, Australia,** for the sale of Canadian specialties, and two parties have written to place their services at the disposal of firms not already represented. Excellent references are supplied.

78 **Ash Stems.**—A **Stourbridge, England,** firm wishes to hear from Canadian firms in a position to supply ash stems for forks and spades.

79 **Bacon, Hams, etc.**—A **Cape Town, South Africa,** firm of commission agents doing business with the largest firms in South Africa are desirous of getting into touch with the best Canadian houses exporting bacon, hams, butter and cheese.

80 **Barrel Heads and Staves.**—A **Lancashire, England,** firm of manufacturers invites correspondence from Canadian shippers of oak barrel heads and staves.

81 **Bran and Oatmeal.**—An importer at **Aberdeen, Scotland,** is open for good connections in Canada with shippers of broad, flaky, wheat bran, and also with millers of oatmeal.

82 **Buckles, Elastic Webbing, etc.**—A party in **Stratford, Ontario,** who is going into the manufacture of suspenders and belts, asks for the names of Canadian houses in a position to supply the above.

83 **Cable.**—An oil company in **Western Ontario** is open to buy 1,600 feet of oil-well drilling cable.

84 **Canned Goods.**—A **Liverpool, England,** firm asks for prices of all descriptions of canned goods from Canadian canners.

85 **Caps.**—Manufacturers of felt caps are invited to supply quotations on the red and blue Fez caps, so generally worn in the Orient. The trade is at present monopolized by Germany, and distributing houses would welcome competition. A reputable house in **Vienna** enquires.

86 **Cider.**—A **Birmingham, England,** firm, wishes to hear from Canadian firms in a position to ship quantities of the best quality cider.

87 **Cloth, Triplex.**—A supply of this article is desired by a firm in **Victoria, B.C.,** who use it in making up waterproof coats for rough wear.

88 **Display Fixtures (Metal).**—A wholesale merchant in **Nottingham, England,** desires to purchase for cash specialties of this kind that are new to the English market.

89 **Dried Apples.**—A **French** importer is desirous of obtaining the representation of a good Canadian house for the sale of dried apples.

90 **Handles.**—A **New York** export house asks for D. shovel handles made from wood other than ash, e.g., maple, beech, or birch.

91 **Handles and Hubs.**—A well-known export house in **New York** asks to be placed in touch with Canadian makers of ash fork and rake handles, axe, pick and broom handles, also elm hubs, with a view to making purchases for South African clients.

92 **Handles, Shovel and Axe.**—A **Cradley Heath,** England, firm wishes to get in touch with Canadian firms open to supply shovel and axe handles.

93 **Hay.**—A **Yorkshire, England,** firm asks to be put in direct communication with Canadian shippers of timothy and clover hay, and invites correspondence with quotations.

94 **Hoists and Derricks,** are enquired for by a correspondent of "Industrial Canada" in **Saskatchewan.**

95 **Lobsters.**—A **London, England,** firm, would be pleased to get into correspondence with high-class Canadian lobster shippers.

96 **Meats (Canned), Lumbering Tools, Fancy Cotton Goods, Leaf Tobacco.**—A commission house in **Liverpool, England,** having extensive connections on the West African Coast, is anxious to secure the above from Canadian manufacturers. All articles are for native consumption, and the cheap grades only are desired.

97 **Paper.**—A firm in **Birmingham, England,** wishes to get in touch with manufacturers of paper for stationery purposes.

98 **Paper.**—An old established and progressive firm of manufacturers' agents in **Shanghai, China,** is open to represent reliable Canadian firms in that market. Paper is particularly enquired for, and a good opening is said to exist. Samples have been forwarded and bank references supplied.

99 **Paper, Wallpaper, Tin and Copper Foil.**—A correspondent in **Georgetown, Demerara,** asks for quotations on glazed paper of assorted colors; size 24 x 30; also gold and silver paper, plain and figured, 20 x 24; copper foils, assorted colors, in sheets 6 x 12; tin foil (white) in ¼-lb. rolls. Also wall paper of cheap quality. Samples of the above have been supplied and may be examined at this office.

100 **Peas.**—An **English** firm of pea merchants desire to get into correspondence with Canadian exporters of peas of good quality, of which they purchase considerable quantities.

101 **Pine.**—A large user of Canadian red pine deals wishes to hear from timber merchants in Canada who can supply regular quantities.

102 **Portland Cement.**—A **Glasgow, Scotland,** firm, would like to get into touch with Canadian manufacturers of Portland Cement in a position to undertake export trade.

103 **Sash and Door.**—A firm in **London, England,** doing business as export merchants, wishes to procure a line of the above suitable for the South African market, preferably low grades, to compete with Swedish goods. Prices are asked f.o.b., New York, Montreal, and St. John. Terms, cash against B.L. Bank references supplied.

104 **Sash and Door.**—A **Lancashire, England,** firm asks for prices c.i.f., Manchester of pine doors and window frames from Canadian manufacturers.

105 **Straw Wrapping Paper, Paper Bags, Split Peas, Pearl Barley, Rolled Oats, Brooms, Soda Biscuits, Cordage, Codfish, Corsets.**—Inquiry is made for the above lines by a party in **Demerara** who covers all the West Indies twice a year, and who is prepared to push business actively on a commission basis. Bank reference supplied.

106 **Syrup.**—A **Norwegian** firm desires to get into touch with Canadian firms exporting syrup.

107 **Trade Journals.**—A commission house in **Kumbakonam, India,** desires to subscribe to a few representative Canadian Trade Journals.

108 **Wash-boards.**—A **Manchester, England,** firm, asks for prices of wash-boards from Canadian manufacturers.

Exhibit of Canadian Industries.

A description of the preparations in progress to make ready the Canadian building at the New Zealand Exhibition is given in a letter issued by the Commissioners in charge:

"Mr. Burns, Canada's Commissioner is one of the busiest men in Christchurch just now. He is rapidly unpacking his exhibits in his court, and is superintending the work of a corps of men whom he has employed to set in order the display which the Lady of the Snows intends to make. When he was interviewed by a reporter yesterday, he was standing in a pile of cases of many shapes and sizes, some of which had been broken open, and had been made to give up the exhibits they had brought out from Canada. All these cases are made conspicuous by a flag that has been painted on them. A Union Jack is shown in a corner of the flag, which has a red background. Opposite to the Union Jack there is a large green maple leaf, and on it a beaver, climbing along a log. The flag is entirely unofficial. It is for exhibition purposes only; and it serves the useful purpose of enabling the Commissioner or his assistants to recognize Canada's exhibit cases without any difficulty on the wharf, the railway station, or any other place where they might be left. Mr. Burns represents the Exhibition Branch of the Canadian Department of Agriculture, which has adopted the flag just described.

The principal work now in hand is the decoration of the whole of the southern wall. This work represents a color scheme, which is dainty, striking, pleasing and effective The colors are red, green and gold. The red and green are supplied by cloth, which is being hung on the wall, and the gold by stems of native grasses and grain, which are made into fans and other shapes. The pillars in the court, and also great arches which will be erected will be decorated in the same way.

The exhibits will be of a very representative nature, and they will be designed to show what Canada is doing in commercial and industrial matters. There will be samples of Canada's minerals, fruits, honey, maple syrup, cheese, grain, grasses, instruments, machinery, furniture, rubber goods, hardware, ovens, horse-vehicles, bicycles, motor cars, woodware, wallpaper, pulp-wood, printing paper, and so on; and Canada's magnificent scenery will be well illustrated.

Wheat to South America.

Canada may develop an export trade with the countries on the west coast of South America in flour milled in Vancouver from Alberta wheat. The officials of the C.P.R. are looking into the possibilities of this trade. At present there is a considerable business done from California and Puget Sound in flour milled from the soft grains of California and Washington. It is felt that much of this could be displaced by hard Canadian wheat. Hitherto there has not been enough wheat grown in Alberta to permit of extensive exporting, but after this year the Province will have a large surplus over what is wanted for home consumption and seeding.

Factory for Sale.

A large and valuable plant in Vancouver, B.C., suitable for any iron working industry, is for sale. Excellent shipping facilities by rail or water. Apply B.C. Wire and Nail Co., Ltd. Box 120, Vancouver.

The News

Have You

a trade mark or name to designate some line of goods you are selling?

Advertise

Have You

goods to offer having some distinctive features making them different from those of your Competitors?

Advertise

Have you

goods to sell to the public and you wish consumers to become familiar with their name and quality?

Advertise

Do You

wish to have **your firm's name** one that will be a perpetual asset and which will be as familiar as a proverb to Canadians?

Advertise

Do You

wish to be original in your methods, to cause people to follow the expansion of your business with interest?

Advertise

When You Advertise

The Daily Paper is the only all-the-time medium to bring results

Do You

wish to use a paper whose influence and drawing quality is second to none in the evening field it covers?

Use The News

Do You

wish to use a paper whose **Editorials** are **able,** whose **News** is **bright,** and whose pages, whether in **Advertising** or **Reading matter, are clean?**

Use The News

Do You

wish to use a paper whom other Advertisers have tried out, and got the best results?

Use The News

The News display rate is **4 cents per agate line, or 56 cents per inch,** and you are asked to use **only the amount of space which will pay you.**

If you want to know anything about advertising in connection with your business, write

THE NEWS - TORONTO

TRACK AND RAILWAY SUPPLIES

HAND CARS - PUSH CARS

TRACK SCALES

BAGGAGE SCALES STOCK SCALES

SCREW JACKS RATCHET JACKS

BALL BEARING JACKS

TRACK DRILLS WRECKING INCLINES

SEMAPHORE AND SWITCH STANDS

A full line of specialties made by **BUDA FOUNDRY AND MFG. CO.** carried in stock by

CANADA FOUNDRY CO.

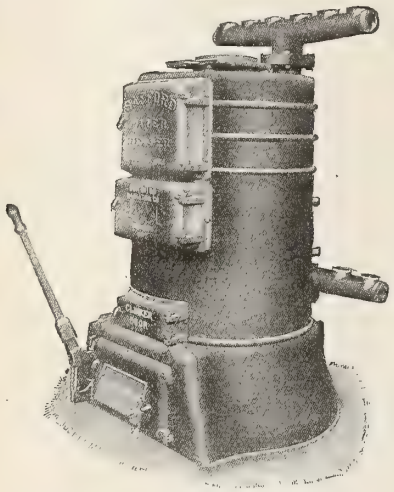
LIMITED

Head Office and Works: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland

The "Safford" Hot Water Boiler

Has developed a higher efficiency and greater heating capacity, relative to its fuel consumption, than any other Boiler on the market. It meets every requirement of up-to-date Hot Water Heating, and can be relied upon to perpetuate that enviable reputation which the "Safford" Radiator now enjoys.



Its fire-pot is constructed to hold sufficient coal to provide ample water circulation for proper amount of radiation, for not less than 8 hours with least amount of caretaking.

A certain volume of the hottest water quickly circulates upward directly to the mains and radiators, without circulating through all the sections, thus insuring quick results at radiators.

It has cast-iron machine turned nipple joints, insuring a perfect joint, and obviating the necessity of taking down the Boiler every few years to be regasketed or repacked.

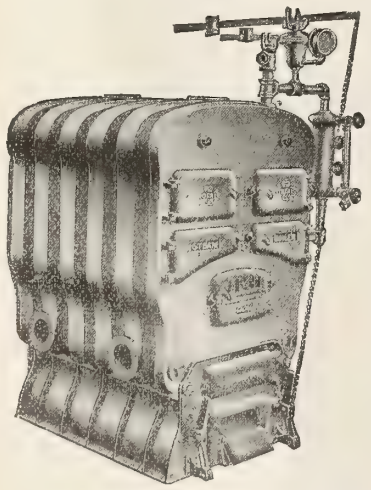
It is very low in construction permitting its erection in low cellars without a pit.

It illustrates economy of fuel in the highest degree.

Only scant attention needed to the firing.

The "Triumph" Steam Sectional Boiler

Is the climax of scientific skill in Steam Heating appliance, having the largest fire-to-water surface possible.



It maintains heat for 8 hours in coldest weather.
Maintains heat 12 to 20 hours in moderate weather.
Has ample combustion chamber between fuel line and crown sheet.
It utilizes the highest possible percentage of fuel power.
It has a large door level with grate for cleaning fire with slice bar.
An exceedingly easily managed shaking and dumping grate.

The "Safford" Hot Water Boiler or the "Triumph" Steam Boiler when combined with "Safford" Radiators form a matchlessly satisfactory and economical heating system for the largest Institution or the smallest house,—a heating system that rightly merits and wins the unqualified commendation of both heating engineers and users.

Illustrated Catalogue mailed free to any address on application.

THE DOMINION RADIATOR CO., LIMITED

HEAD OFFICE: TORONTO

BRANCHES:—MONTREAL, QUEBEC, ST. JOHN, N.B., WINNIPEG, VANCOUVER, LONDON (England), EDINBURGH, GLASGOW, ANTWERP, BERLIN, CHRISTIANA, AUCKLAND, N.Z., JOHANNESBURG, S.A.



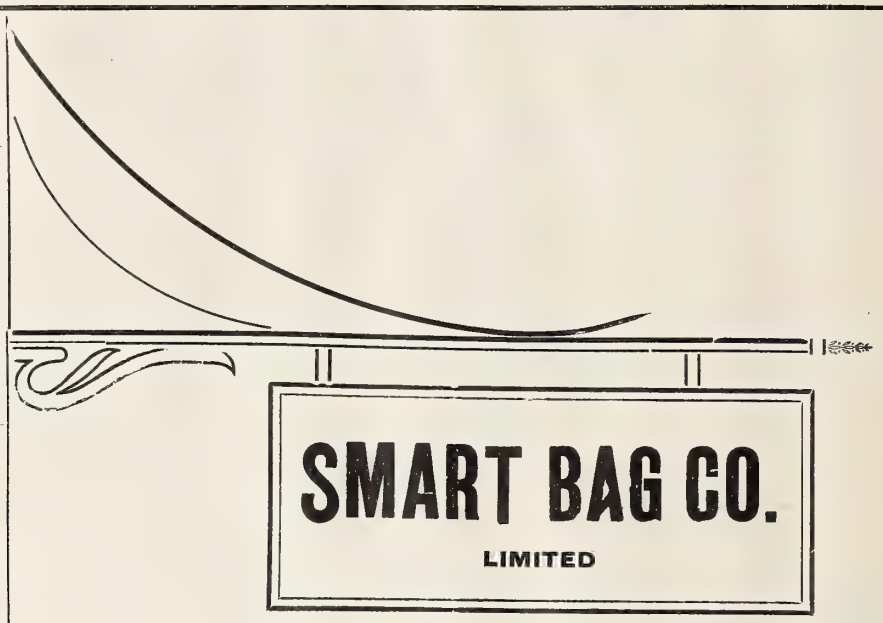
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ENGRAVING Co·
ILLVSTRATORS·
DESIGNERS·
ENGRAVERS·
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HALF-TONE·
ELECTROTYPERS·
168 Bay Street·
Toronto·

Service Quality Price

Is

J. L. Jones Engraving Company's

Symbol of Success



We manufacture Jute and Cotton Bags of every description.

Our Printing Departments being right up-to-date, we are able to make a specialty of Bag Printing.

Having factories at Montreal, Toronto and Winnipeg, we are able to give our customers very prompt service.

We aim to give entire satisfaction.

Be sure and get our prices before placing order elsewhere.

FACTORIES AND OFFICES:
MONTREAL — TORONTO — WINNIPEG
HEAD OFFICE:
MONTREAL

THE WIRE & CABLE CO.

MONTREAL.

MANUFACTURERS OF

Electrical Wires and Cables . .

FOR

TELEPHONE,

TELEGRAPH,

LIGHTING

AND

TROLLEY PURPOSES.



No. 2 Colliery, Dominion Coal Co., Glace Bay.
Walls, Roofs and Floors by Expanded Metal System.

EXPANDED METAL
SYSTEM OF
FIREPROOF BUILDING
CONSTRUCTION
FOR
Floors, Roofs, Partitions,
Ceilings, Columns, etc.

EXPANDED METAL
FOR
Concrete Reinforcement in
Engineering Work.

Endorsed the World over.

Contracts Taken.
Material Supplied.

Catalogues, Estimates, etc.,
upon application.

EXPANDED METAL AND FIREPROOFING CO., Limited
100 KING ST. WEST, TORONTO.

MADE IN CANADA

THE STEEL RAIL MILL OF

The Algoma Steel Co., Limited, Sault Ste. Marie, Ont.

IS NOW IN OPERATION AND TURNING OUT

A.S.C.E. STANDARD SECTION

Steel Rails

OF HIGHEST QUALITY

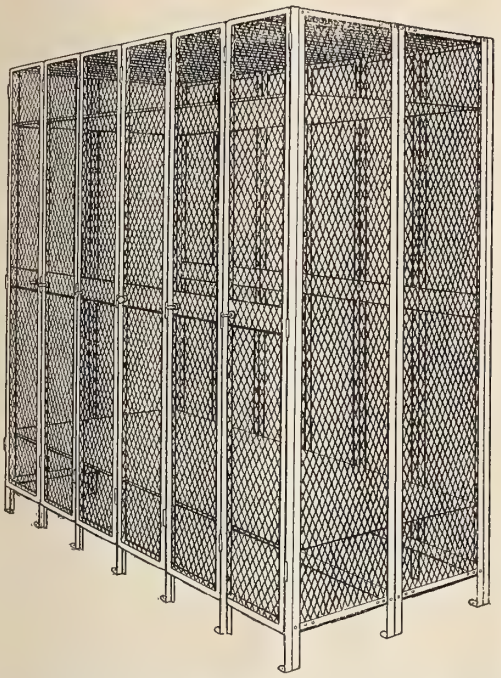
Your Specification will have our best attention

OFFICES
Canada Life Building
MONTREAL
100 King Street West
TORONTO

DRUMMOND, McCALL & CO.

General Sales Agents
THE ALGOMA STEEL CO., Limited

Every up-to-date factory counts a proper LOCKER SYSTEM a necessity, it saves money.

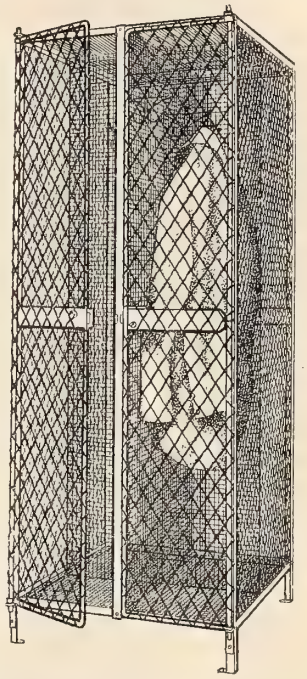


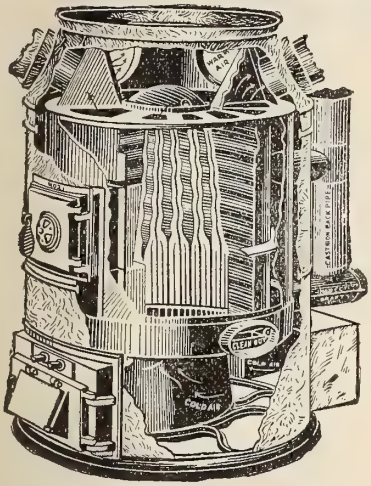
WRITE US ABOUT YOUR REQUIREMENTS.

The
Geo. B. Meadows

TORONTO WIRE, IRON AND BRASS WORKS COMPANY, LIMITED,

67 Wellington Place,
Toronto
Canada





"KELSEY"
IN SIX SIZES
Heating capacities from 5,000 to 100,000 cubic feet

KELSEY Corrugated Warm Air GENERATORS

(PATENTED

HEAT MAKERS, FUEL SAVERS
FOR HOME, CHURCH, SCHOOL

THE KELSEY is unlike any other warming and ventilating device, as to both construction and operation, consequently **not in the hot air furnace class.**

THE KELSEY SYSTEM assures the most sanitary, satisfactory and economical warming with proper ventilation.

THE KELSEY SYSTEM, while most closely allied to **indirect** Steam or Hot Water heating, is less expensive to install and much more economical on fuel.

THE KELSEY SYSTEM is not an experiment, having been in satisfactory operation for the past sixteen years, with largely increasing sales each and every year.

30,000 PLEASED KELSEY USERS

DIRECT CONTRACTS MADE—PROPER RESULTS GUARANTEED

Full particulars promptly given on request.

Exclusive Canadian Makers

THE JAMES SMART MFG. CO., Limited

Head Office and Works: BROCKVILLE, ONT.
Western Branch: WINNIPEG, MAN.

ST. LAWRENCE SUPPLY CO.

Limited

Manufacturers in Iron and Steel

Contractors' Equipment
Railway Specialties
Iron and Steel Forgings
Engineers and Machinists

All descriptions of special machinery manufactured to order

Catalogues and Quotations on application

ONTARIO ST., Corner Moreau, MONTREAL

THE WATEROUS ENGINE WORKS CO.,

LIMITED

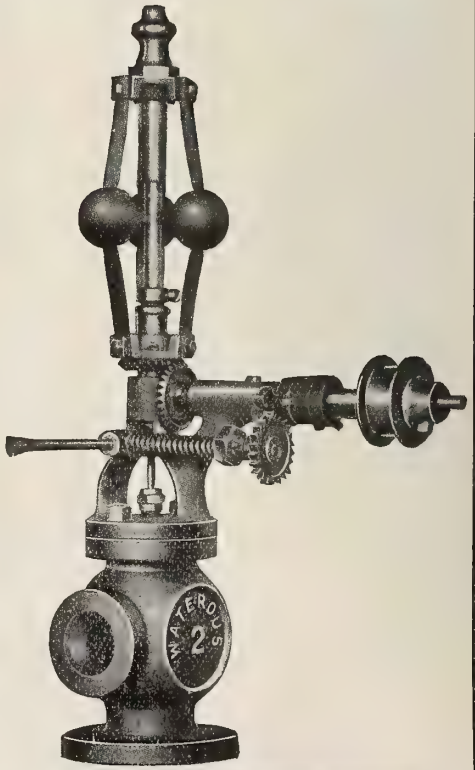
BRANTFORD = CANADA

Manufacturers of—

The Celebrated Pickering Governor



WILL REGULATE THE SPEED OF ANY ENGINE



We always keep a Stock of these Governors on hand

BUILT IN ALL SIZES

Get our Prices

High Grade Open Hearth Steel Forgings

OF EVERY DESCRIPTION

In the rough or finished state, in weight from 10 lbs. to 10,000 lbs. each.

Your inquiries will receive our prompt and careful attention

CANADA FORGE COMPANY, Limited, WELLAND, ONT.

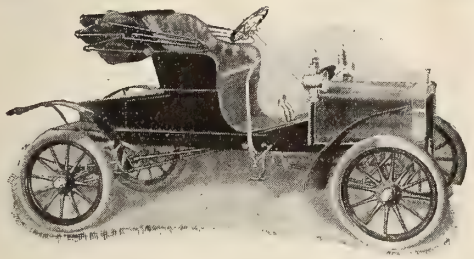
MALLEABLE IRON CASTINGS

We are now ready for business with an up-to-date Foundry and experienced men. FIRE PROOF PATTERN VAULT

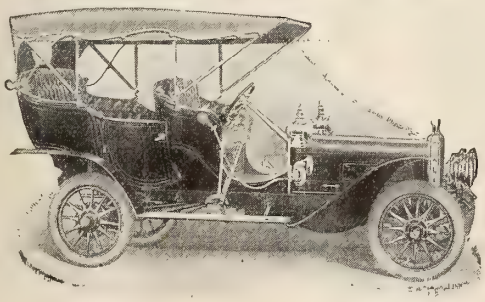
WRITE US YOUR REQUIREMENTS

Galt Malleable Iron Co., Ltd. - Galt, Ont.

4 Cylinder Runabout **THE FORD** 6 Cylinder Touring Car



Model N. 4 cylinder vertical 15 H.P. 84 in. wheel base. Speed, 40 miles. Weight, 800. Direct bevel gear drive. **Price, $650.00.**



Model K. 6 cylinders vertical 4½ x 4¼. 40 H.P. Speed, 50 miles per hour to 4 miles on a high gear. Improved planetary transmission. 114 inch Wheel Base. Perfected magneto ignition. Mechanical oiler. Weight, 2,400 pounds. **Price, $3,200.00.**

Write for full particulars about these two famous Cars

The Ford Motor Co. of Canada, Ltd.

WALKERVILLE, ONTARIO

ALL PAINT OF MERIT

must bear a price in proportion to the skill, taste, time and expense attending its manufacture.

The Colors, Varnishes, Stains and Enamels bearing the label of **The Canada Paint Company** may cost a fraction more than the ordinary "get-rich-quick" compounds, but

THE VALUE IS THERE!

RUSKIN says :—"A composition for cheapness and not for excellence of workmanship, is the most frequent and certain cause of the rapid decay and entire destruction of arts and manufactures."

Poor Paint Rapidly Disappears

Manufacturers should insist upon the painting material made by

The CANADA PAINT COMPANY,

Limited

THE LARGEST COLOR AND VARNISH MAKERS IN THE DOMINION.

PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY

PENBERTHY

Used by all Leading Gas Engine Builders in Canada.



"Sultan" Gas Engine Cyclinder Oiler.

Easy to Operate.

WE MAKE A FULL LINE of OIL & GREASE CUPS FOR ALL USES

INJECTOR PERFECTION

THAT'S PENBERTHY.

LEADING MANUFACTURERS, LEADING JOBBERS, LEADING DEALERS, LEADING MECHANICAL EXPERTS WILL HAVE NO OTHER.

Nearly 20 YEARS on the Market proves the reason.

THERE ARE NO BRASS GOODS LIKE PENBERTHY BRASS GOODS

MANUFACTURED BY

Penberthy Injector Co., Limited,
WINDSOR - ONT.

Used by Leading Stationary Engine Builders in Canada.



"Salute" For Stationary Engines.

Sight Feed and Snap Lever.

DON'T TAKE THE IMITATIONS; GET THE REAL THING

PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY

THE CONSOLIDATED MINING AND SMELTING CO. OF CANADA LTD.

Head Office and Works - TRAIL, BRITISH COLUMBIA

SMELTERS AND REFINERS

Purchasers of all Classes of Ores. Producers of

FINE GOLD, FINE SILVER, BASE BULLION,
COPPER MATTE, BLUESTONE, LEAD PIPE

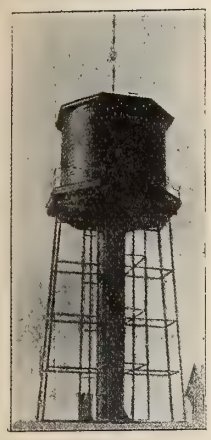
AND

PIG LEAD

TRAIL BRAND--THE PUREST PRODUCED ANYWHERE

(Analyzes 99.995% pure.)

TANKS



STEEL OR WOOD.
STEEL TOWERS.
HOSE AND BELL TOWERS.
FLAG STAFFS.
WINDMILLS.
GASOLINE ENGINES.
PUMPS.

We have a large and growing line of

Sprinkler & Municipal Supply Tanks.

Hydraulic Engines
(The "Rye")
It will pump water with water.

Largest and best

GALVANIZING PLANT

In Canada.

Ontario Wind Engine & Pump Co.
LIMITED
Winnipeg, Man. Toronto Montreal, Que.

DAVIDSON'S
STEEL ENAMELLED WARE

Attractive in Color
Smooth in Finish
Unequalled in Wear



OUR BRANDS
"COLONIAL"
"PREMIER"
STAR
DECORATED
and
WHITE

We are also manufacturers of

Pressed, Pieced, Japanned and Lithographed TINWARE

COPPER, SHEET IRON AND GALVANIZED WARES
TINNED SPOONS, &c., &c.

Catalogue on application

THE Thos. Davidson Mfg. Co. LIMITED
MONTREAL

HOW IS YOUR GLOVE TRADE?



GLOVES, MITTS AND MOCCASINS

During the more than 30 years' success of our business, we have always been at the front in all that pertained to improvements in the production of Gloves and Mittens. We have brought out new ideas. We have given the trade splendid values—goods which have possessed style, given satisfaction and long service. Our representative will call on the Trade in due season. Make it a point to see our samples before placing your orders. We guarantee satisfaction, and the maximum in value at the minimum of cost.

THE GLOVERS OF CANADA **W. H. STOREY & SON, Ltd.** ACTON, ONT. Established 1866

What is Your Book-Keeper's Time Worth?

BUSINESS SYSTEMS LIMITED
SYSTEM THE SECRET OF SUCCESS
TORONTO.

Is your ledger arranged on any special system?

Ten minutes wasted six times a day looking for an account means a daily loss of one hour. On a ten hour day, this means a loss of a month a year.

And your book-keeper has more than six accounts a day to look up.

Can you afford it?

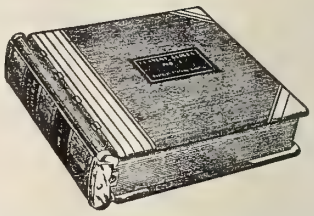
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Business Systems ledgers are all built on the loose-leaf principle.

Business Systems make your ledger accounts run alphabetically; if an account runs over the space you gave it, you merely drop in another leaf.

Business Systems loose-leaf ledgers open perfectly flat and give a level writing surface.

Write us to-day for full particulars.



This will not obligate you in any way and will enable us to tell you exactly how Business Systems may be most economically applied to your accounting department.

BUSINESS SYSTEMS
LIMITED
90 SPADINA AVE.
TORONTO, CANADA

Nova Scotia Steel & Coal Co.

LIMITED

HEAD OFFICE: NEW GLASGOW, NOVA SCOTIA

Steel Works - - - -	TRENTON, N.S.
Blast Furnace - - - -	FERRONA, N.S.
Iron Mines - - -	WABANA, NFLD.
Collieries - - - -	SYDNEY MINES, N.S.

"OLD SYDNEY COAL"

Shipping Port, North Sydney

ADDRESS ALL CORRESPONDENCE TO HEAD OFFICE

The Pride of the Paper Trade

This water-mark on each sheet

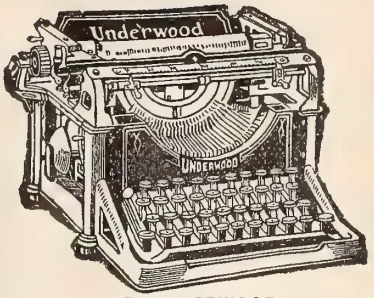
FOR LETTER HEADS &c.

SUPERFINE LINEN RECORD

FOR ACCOUNT BOOKS

Made in Canada by **The Rolland Paper Co.**

HIGH GRADE PAPER MAKERS



THE UNDERWOOD

YES!

Almost any Manufacturer will endorse the

UNDERWOOD

TYPEWRITER

It is the BEST Writing Machine
NEARLY Everybody knows it

LET US CONVINCE YOU

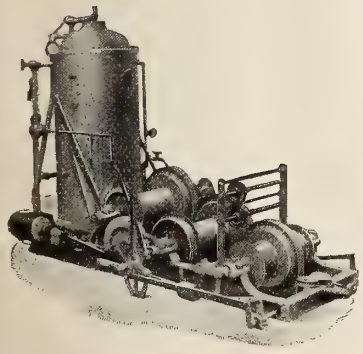
Nearly 8000 in use in Canada

NOT AN EXPERIMENT

UNITED TYPEWRITER CO., LIMITED,

TORONTO, ONT.

Montreal, Que. St. John, N.B. Hamilton, Ont. London, Ont.

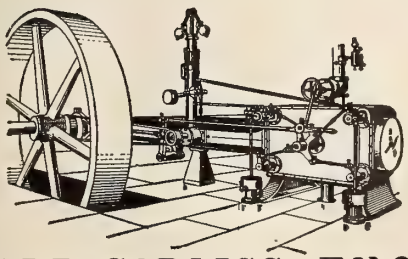


M. BEATTY & SONS, Limited

WELLAND - ONTARIO - CANADA

DREDGES, DITCHERS, DERRICKS, STEAM SHOVELS,
HOISTING ENGINES, SUBMARINE ROCK DRILLING MACHINERY,
Centrifugal Pumps for Water and Sand, Stone Derricks, Clam Shell Buckets,
Coal and Concrete Tubs and other Contractors' Machinery.

AGENTS:
E. LEONARD & SONS, Montreal, Quebec and St. John, N.B.
THE STUART MACHINERY CO., Winnipeg, Man.
THE WM. HAMILTON MFG. CO., Vancouver, B.C.



LEONARD-CORLISS ENGINES

Standard and Heavy Duty. Peerless Self-Oiling and Leonard Automatics for Electrical and Manufacturing purposes. Standard Return and Water Tube Boilers, all sizes. Open and Closed Exhaust Steam Heaters, Pumps, etc., for complete Steam Plants.

E. LEONARD & SONS, London, Canada

MANUFACTURED BY

MICA BOILER COVERING COMPANY, Limited

86 to 92 Ann Street, MONTREAL

MICA Fireproof Coverings

Highest Insulator of Heat Known

FOR STEAM, HOT AND COLD WATER PIPES, BOILERS, FLUES, FURNACES, ETC. . . .

COLD STORAGE INSULATIONS—SOUND INSULATION

Dealers in

ENGINEERS' AND MILL SUPPLIES, SHEATHINGS, ASBESTOS GOODS, MINERAL WOOL, ELECTRICAL MICA

CONTRACTORS TO THE BRITISH ADMIRALTY.

The Dunlop Creed

WE believe that the trade mark, the two hands, is the most valuable asset in our business, and we shall aim to keep it always in good repute by fair and square dealing.

¶ We believe it is in the fullest sense injurious to our prospects to allow the Dunlop trade mark to be placed on any goods not made of a superior quality of rubber.

¶ We believe in quality. We know that the satisfaction quality gives is lasting, while the satisfaction a purchaser has in buying cheaply is short lived. When he does not find quality he forgets the price paid and begins to think he has been fooled.

¶ As we hope to last in this business we affirm it is our unalterable determination never to compromise the Dunlop standard of quality in rubber.

Stamped with the seal of the



Dunlop Tire and Rubber Goods Company, Toronto,

Why

YOU SHOULD USE

Walker's

Electric Boiler Compound

Because it removes the **Scale** without **Injury** to the **Irons, Packings** or **Connections**, prevents **Foaming,** saves the **Fuel Bill.**

Manufactured by—

THE

ELECTRIC BOILER COMPOUND CO.

LIMITED

GUELPH - - ONTARIO

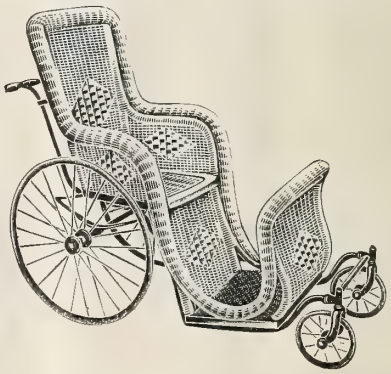
PHONE 396 P.O. BOX 409

Gendron Mfg. Co., Limited.

Our Reed and Rattan Furniture

FOR THE COMING SEASON

IS NOW ON EXHIBITION



They are dainty in design, thorough in workmanship, and perfect in finish.

Children's Sleds & Sleighs

Our line is the most complete ever offered the trade.

Catalogue grade "F" contains all descriptions and cuts.





For the **CHRISTMAS TRADE** a full line of

Doll Carriages, Go-Carts, Cradles, Shooflies, Wagons, etc.

Catalogues grade "D" and "E" show the complete line.

GENDRON MFG. CO.,

LIMITED,

TORONTO.

THE CANADA CHEMICAL MANUFACTURING CO., Limited

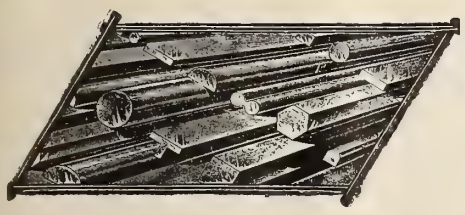
COMMERCIAL QUALITY — MANUFACTURERS OF — CHEMICALLY PURE QUALITY

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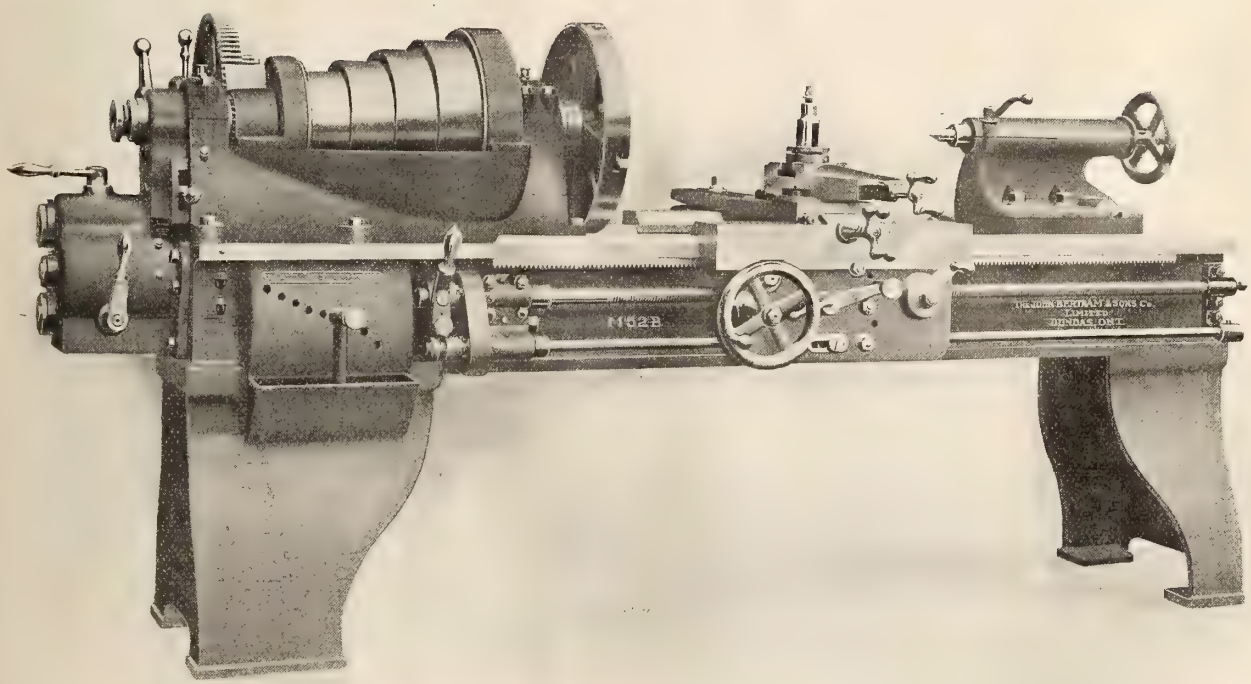
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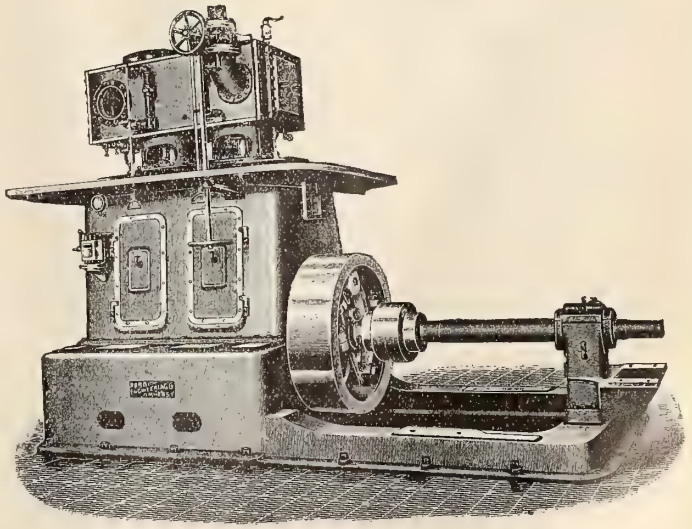
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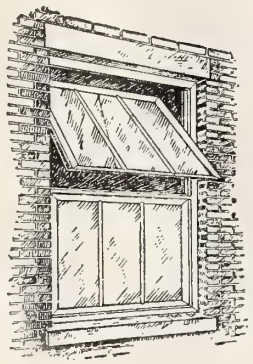
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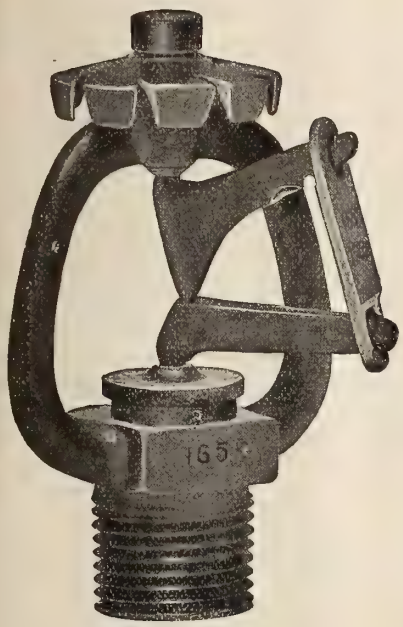
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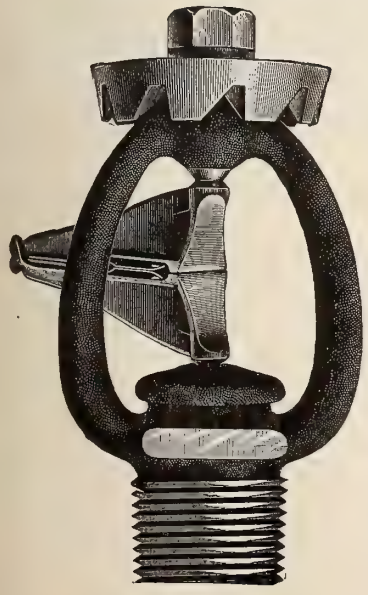
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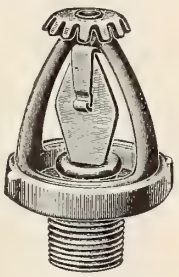
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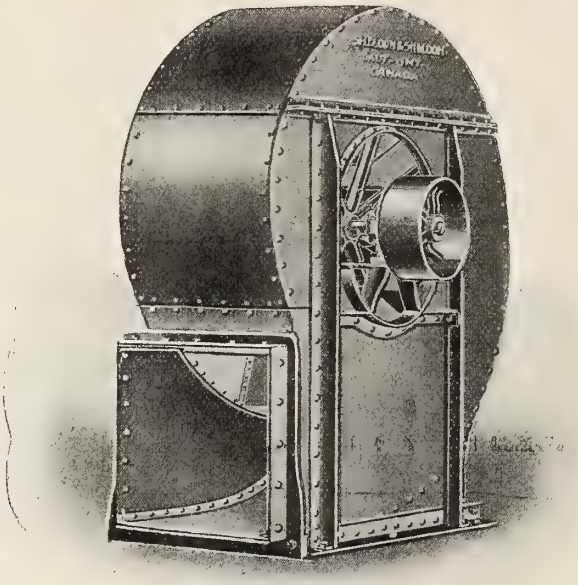
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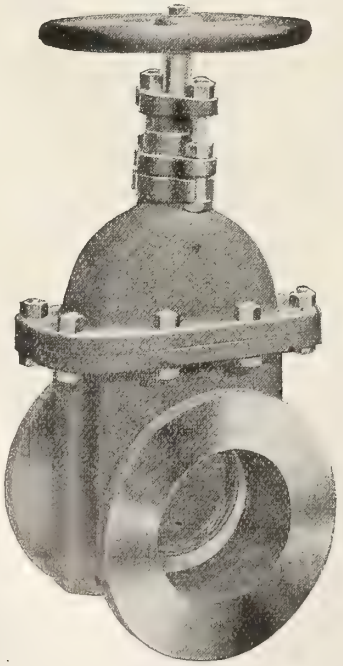
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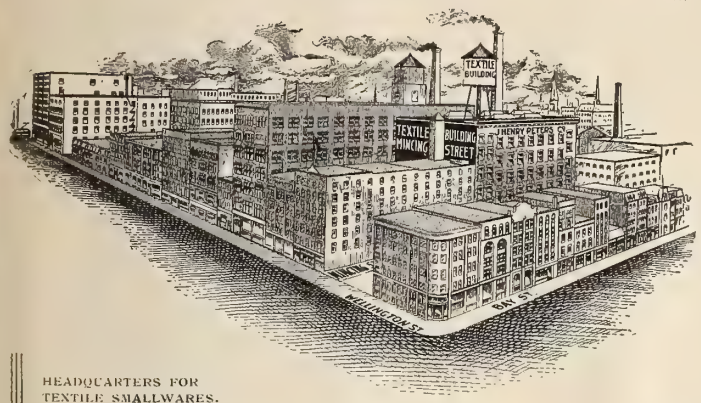
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EXECUTIVE COUNCIL

OCTOBER MEETING.

Meeting largely attended—Committees for the year appointed—Mr. Cockshutt anticipates a profitable year for the Association—Insurance Committee advances the formation of Mutual Companies—Assume expenses of investigation and organization—New offices in Traders' Bank—Parliamentary Committee deal with many questions—Improvements in transportation—Report of Tariff Committee.

The first meeting of the 1906-1907 Executive Council of the Canadian Manufacturers' Association was held in the offices of the Employers' Association, on Oct. 25th, with the President, Mr. Harry Cockshutt, in the chair.

Others present were: Messrs. Geo. J. Armstrong, St. Catharines; G. Frank Beer, Toronto; C. Bermingham, Kingston; H. Bertram, Dundas; C. A. Birge, Hamilton; Geo. Booth, Toronto; Geo. Brigden, Toronto; J. H. Burland, Montreal; P. H. Burton, Toronto; J. W. Cowan, Toronto; Jas. Davidson, Montreal; W. W. Doran, Niagara Falls; J. S. N. Dougall, Montreal; L. V. Dusseau, Toronto; J. F. Ellis, Toronto; S. W. Ewing, Montreal; Thos. Findley, Toronto; H. W. Fleury, Aurora; Geo. D. Forbes, Hespeler; D. J. Fraser, St. Johns; P. Hamill, Montreal; W. M. Gartshore, London; W. K. George, Toronto; Jas. Goldie, Guelph; R. S. Gourlay, Toronto; Lloyd Harris, Brantford; S. Harris, Toronto; S. R. Hart, Toronto; E. G. Henderson, Windsor; Jos. Horsfall, Montreal; J. H. Housser, Toronto; J. A. I. Hunt, London; R. McLaughlin, Oshawa; Hugh C. MacLean, Winnipeg; W. K. McNaught, Toronto; C. S. Meek, Toronto; R. Munro, Montreal; J. P. Murray, Toronto; H. G. Nicholls, Toronto; W. C. Phillips, Toronto; J. A. Publow, Hamilton; Wm. Robins, Walkerville; A. S. Rogers, Toronto; Hon. J. D. Rolland, Montreal; F. A. Rolph, Toronto; J. T. Sheridan, Toronto; J. H. Sherrard, Montreal; Louis Simpson, Valleyfield, Que.; J. M. Sinclair, Toronto; T. H. Smallman, London; Wm. Stone, Toronto; H. Stroud, Paris; W. B. Tindall, Toronto; R. L. Torrance, Guelph; Geo. W. Watts, Toronto; and S. M. Wickett, Toronto.

Minutes of the August meeting were taken as read.

Communications were received as follows:

(a) From the following members of the Council regretting that they were unable to be present: Messrs. C. C. Ballantyne, Montreal; John Hendry, Vancouver; J. A. Coulter, Ingersoll; J. M. H. Robertson, Montreal; J. J. McGill, Montreal; Arthur White, London; G. C. H. Lang, Berlin; T. F. Matthews, Peterboro; Geo. Sweet, Hamilton; Wm. Smaill, Montreal; J. M. Taylor, Guelph; R. J. Whyte, Smith's Falls; T. A. Russell, Toronto Junction; and L. J. Breithaupt, Berlin.

(b) From Mr. R. J. Whyte, pointing out the present regulations regarding the advertisements of manufacturers on freight cars, and suggesting that efforts be made to have more liberal treatment granted by the railways. This was referred to the Railway and Transportation Committee.

(c) From the Citizens' Industrial Association, extending an invitation to the Association to be represented at its Convention to be held in Chicago, December 3rd and 4th next. This communication was filed.

(d) A telegram from Mr. H. S. Southam, of the "Ottawa Citizen," addressed to the President of the Association at Winnipeg, asking the Association to put itself on record as favoring the international peace movement, was received too late for action at Winnipeg. The Council referred the same to the Commercial Intelligence Committee.

APPOINTMENT OF COMMITTEES.

Finance Committee.—Moved by Mr. Harris, seconded by Mr. Burton, that the Finance Committee for the current year consist of Messrs. W. B. Tindall, J. F. Ellis and A. W. Thomas. Carried.

Technical Education.—Moved by Mr. J. F. Ellis, seconded by Mr. Harris that the Technical Education Committee for the current year be composed as follows:

S. Morley Wickett (Chairman), Alfred Burton, P. W. Ellis, Thos. Findlay, Gerhard Heintzman, Harold Van der Linde, J. P. Murray, Frank A. Rolph, Geo. A. Howell, J. F. Mackay, Toronto, and two to be appointed by the Montreal Branch.

REPORTS OF OFFICERS AND COMMITTEES.

President's Report.—Mr. Cockshutt expressed his pleasure in having such a large attendance at the first meeting of the Council and his appreciation of the honor shown him by his election. He spoke of the valuable work that the Association was doing in the interests of the manufacturers and of the country generally and expressed the hope that he would receive the hearty co-operation of all the members of the Council.

Treasurer's Report.—The Treasurer, Mr. Geo. Booth, presented a statement showing the finances of the Association up to September 30, 1906, which was considered satisfactory, and unanimously adopted.

INSURANCE COMMITTEE.

The report of the Insurance Committee was presented by Mr. W. B. Tindall, and on motion of Mr. Tindall, seconded by Mr. Burton, was adopted.. The report is as follows:

"The Insurance Committee at the first meeting of the year organized as follows:—Chairman, W. B. Tindall; Vice-Chairman, A. Jephcott; Executive Committee, Messrs. Tindall, Jephcott, Burton, Kernahan, Beer.

Mutual Fire Insurance.

In the report of the Insurance Committee to the Annual Convention reference was made to the meeting of subscribers and others interested in Mutual Fire Insurance Companies which was called for Monday, September 17th, and as it was not possible to report the results of the said meeting to the Convention, it was understood that the same should be done at this the first meeting of the Council thereafter.

We have now accordingly to report that the meeting was largely attended and unanimously adopted the following resolutions:

1. That this meeting heartily endorses the recommendation of the Insurance Committee, confirmed by the Executive Council at its March meeting, in respect to the formation of Mutual Fire Insurance Companies by and for Canadian manufacturers.

2. That this meeting is of the opinion that the proposed Mutual Fire Insurance Companies should be organized under the Dominion Insurance Act and by charters derived from the Dominion Government. As it appears, however, that the Insurance Act does not at present afford reason-

able facilities for the organization of such companies, it is requested that the Executive Council of the Canadian Manufacturers' Association, through the Insurance Committee, make every effort to have the Insurance Act amended at the ensuing session of Parliament so as to permit the licensing of Mutual Fire Insurance Companies without a deposit with the Government, but under conditions that will ensure safety in administration and in the security offered to policyholders.

3. That the following named gentlemen be and they are hereby appointed the Provisional Boards of Directors for the two companies which it is proposed to organize, and that the fullest possible powers be conferred upon them in connection with the completion of the said organizations:

Toronto Company.—P. H. Burton, Chairman; G. C. H. Lang, Vice-Chairman; J. D. Flavelle, W. M. Gartshore, W. B. Tindall, A. Jephcott, G. Frank Beer, W. H. Mason, J. W. Cowan, Dan Wilson, J. H. Burland, Hon. J. D. Rolland, T. M. Cutler, T. H. Estabrooks, B. E. Bechtel.

Montreal Company.—J. H. Burland, Chairman; Hon. J. D. Rolland, Vice-Chairman; J. J. McGill, Chas Gurd, S. W. Ewing, Jos. Allen, C. C. Ballantyne P. H. Burton J. D. Flavelle, Geo. E. Amyot, W. H. Rowley, T. M. Cutler, T. H. Estabrooks, G. W. Ganong, M.P., J H. Blue.

The Committee recommended the Council to agree to the request contained in the second resolution on the condition that the companies when organized bear the entire expenses that may be incurred by the Council or the Committee in connection therewith.

Assume Preliminary Expenses.

The Committee report further that at a meeting of the Provisional Directors of the proposed Mutual Companies held this morning the following resolution was passed:

WHEREAS, the investigations made by the Insurance Department during the past year have led up to the endorsation of the principle of Mutual Fire Insurance by the Association, and the formation of Mutual Companies by a number of members, and

WHEREAS, the investigations already made have entailed a considerable expenditure of time and money, and that pending the full organization of the Mutual Companies still further expenses will require to be incurred by the Association, therefore it is,

RESOLVED, that upon the completion of the organization of the two Companies for which application for charters are now pending, all expenses already incurred by the Association in connection with their investigations into the subject of Mutual Fire Insurance, or that may hereafter be incurred in connection with the efforts to amend the Insurance Act of Canada, should be accepted as a liability of the companies for preliminary organization expenses, the total of such advances to be repaid to the Association out of the funds of the different companies in equal proportions and to the amount and in the manner that may be mutually agreed upon.

The Committee recommended that a deputation consisting of the President, Vice-President, the Ontario and Quebec Vice-Presidents and Messrs. Ballantyne, Jephcott and Simpson, represent the Association to interview the Government on the subject of the amendment to the Insurance Act, with power to add to their number.

The Provisional directors of the proposed companies this morning appointed Messrs. P. H. Burton, Col. Burland, W. H. Rowley, Geo. E. Amyot, G. Frank Beer, G. C. H. Lang, T. H. Estabrooks, G. W. Ganong, M.P. J. D. Flavelle, J. J. McGill, and S. W. Ewing to join the deputation from the Association, with power to add to their number

The Committee, acting upon the power conferred upon them by the Annual Convention, appointed the same deputation to present to the Government the resolution passed at the said meeting regarding the adoption of a uniform standard fire insurance policy. It was also decided to have the third resolution, respecting the regulation of the aggregate liability that may be assumed in cities and towns by the fire insurance companies forwarded to the Finance Minister with a preamble reciting the need of the safeguard, and inviting the Government's consideration of the subject.

Liability for Goods in Transit.

The Committee draw the particular attention of the members to the report of the Transportation Department on this subject. It is to be hoped that the efforts of that department will be successful in obtaining the elimination from bills of lading of all conditions that relieve the Transportation Companies from liability for loss by fire to goods entrusted to them.

Much of the time of the department has been taken up with the work of preparing reports for the Government's consideration, but a number of cases, involving large amounts of insurance and heavy premiums, have been successfully arranged to the advantage of the members. As a result the Department has been appointed to supervise the entire insurance of two large companies under an annual retaining fee, and this is opening a feature of usefulness that will be more fully considered and reported on at a subsequent meeting.

BRITISH OFFICE COMMITTEE.

The report of the British Office Committee was presented by Mr. Geo. W. Watts, and on motion of Mr. Watts, seconded by Mr. Bermingham, was adopted.

The Secretary was instructed to get all the information possible about those who have made application for the position of London representative, and also about some whose names have been suggested.

A permanent London Office Committee was appointed as follows: Messrs, Geo. W. Watts (Chairman), Thos. Findley, Gerhard Heintzman, W. B. Tindall, J. P. Murray and John Turnbull, Toronto; Geo. McLagan, Stratford; L. J. Breithaupt, Berlin; R. McLaughlin, Oshawa; C. Bermingham, Kingston; S. W. Ewing, Montreal; Louis Simpson, Valleyfield; D. J. Fraser, St. Johns; Col. J. H. Burland, Montreal.

FINANCE COMMITTEE.

The Finance Committee report was presented by Mr. W. B. Tindall, and adopted.

The monthly accounts of the Association, amounting to $2,133.80 were recommended for payment.

The Secretary, Mr. J. F. M. Stewart, and Assistant Secretary, Mr. G. M. Murray, were re-engaged in their respective positions.

PARLIAMENTARY COMMITTEE.

This report was presented by Mr. A. S. Rogers, and on motion of Mr. Rogers, seconded by Hon. J. D. Rolland, was adopted.

The report in part was as follows:

Extra Provincial Corporation and Commercial Travellers Taxes.

The Secretary reported that a copy of the resolution herein passed by the Annual Meeting had been forwarded to the Premier of the Dominion and of each of the Provinces with the request that it receive consideration at the Conference of Premiers. A similar request was forwarded

from the Montreal Branch. Since then it has been reported in the press that the Conference approved of doing away with commercial travellers taxes, and of a modification of corporation taxes. It was decided not to take further action at present.

Deportation of Silver Coinage.

The Annual Meeting passed a resolution to the effect that the Government should continue the deportation of United States silver coinage. The secretary was asked to procure information from members of the Bankers' Association as to the method of deportation, and ascertain, if possible, the reasons why it was stopped. The committee will consider the advisability of meeting the Bankers' Association at a later date.

Ontario Assessment Act.

In view of the assurance of the Premier of Ontario that the Ontario Assessment Act would be considered at the coming session of Parliament, the Committee decided to send out a circular to all the Ontario members asking their views with regard to the same.

Incorporated Company Franchise.

A committee was appointed to interview the Provincial Secretary of Ontario to ascertain, if possible, the legislation that would be necessary to give incorporated companies the right to an expression of opinion on money by-laws.

Mr. E. G. Henderson asked whether or not the Committee had taken action regarding the mission of Mr. W. L. Mackenzie King, Deputy Minister of Labor to Great Britain, to have legislation passed similar to the Canadian law to make it a criminal offence to induce or deter by false information emigrants coming to Canada. The Chairman replied that this matter had not been considered by the Committee, but would be taken up at the next meeting.

RECEPTION AND MEMBERSHIP COMMITTEE.

The report for the committee of 1905-1906 was presented by Mr. L. V. Dusseau. This report dealt entirely with the Western Excursion, and after referring to the great success the excursion had been, from all standpoints, it reported that the committee was able to turn over to the general funds of the Association a surplus of $1,000, and still have sufficient money available to supply each member of the excursion party with a group photograph.

Mr. C. S. Meek presented the report of the 1906-1907 Reception and Membership Committee, and on his motion, seconded by Mr. Forbes, the report was adopted.

It recommended the acceptance of fifty-nine applications for membership, and outlined a campaign that would be undertaken at once to secure new members for the Association.

RAILWAY AND TRANSPORTATION COMMITTEE.

The report was presented by Mr. J. H. Housser, and unanimously adopted. Some of the subjects dealt with were:

Reciprocal Demurrage.

In view of the numerous complaints of delay in securing cars and in handling traffic after being loaded the Committee decided that the question of securing a system of delayage charges against railways for such delays should be again taken up with the Railway Commission. The manager of the department was instructed to communicate with the Railway Commission and to ask for the adoption of some such arrangement before the provisional demurrage rules are made permanent.

Discrimination in Favor of United States.

This question, as dealt with in the annual report, was discussed by the committee. Copies of the resolution passed by the Winnipeg Convention have been forwarded to the Right Honorable the Premier, the Minister of Railways and Canals, the Minister of Customs and the Minister of Finance, and acknowledgements received. It was decided that a deputation should go to Ottawa during the coming session of Parliament to urge upon the Government the necessity for amending the Railway Act so as to absolutely prohibit such discrimination. The complaint of discrimination from Ontario to the East is still pending before the Commission. It was decided that any attempt on the part of the railways to increase rates should be stoutly opposed owing to the fact that this would affect raw materials.

Traffic Forms.

The resolution urging the immediate revision of traffic forms has been forwarded to the Minister of Railways and Canals, and to the Railway Commission. Mr Marlow reported that he attended sittings of the Railway Commission at Winnipeg after the Convention at which this question was referred to. The Chief Commissioner intimated that the revision of forms would be gone on with this Autumn.

C. P R. Insurance.

The Manager of the Department reported that the Canadian Pacific Railway had announced its intention of accepting responsibility for loss and damage to property by fire while in its possession. This decision doubtless results in some measure from the continued agitation which the Association has kept up against limitation of liability in bills of lading. The Canadian Pacific Railway proposes to become responsible for loss or damage by fire whether in cars or warehouses from the time it receives the goods for transportation until they are delivered. It is hoped that the other transportation companies will adopt the same policy, and in any event this will further strengthen the hands of the Association in dealing with the unreasonable conditions on the railway shipping forms when the question is discussed before the Railway Commission.

Australia-New Zealand Line.

The resolution of the Winnipeg Convention relating to the establishment of a line from Eastern Canadian ports to Australia and New Zealand has been forwarded to the Government. A communication was read outlining a proposal to form a company for the purpose of establishing such a line provided the Government will aid the proposal by granting a subsidy. The Association was invited to give its endorsement and support to the promoters when dealing with the Government. The Committee decided that while they could not support the application of any individual promoter for a subsidy to enable the establishment of the line, they would recommend that the Government should render assistance to that end, leaving the question of terms and the awarding of the contract to be dealt with by the Government. The Secretary was instructed to reply to the communication accordingly. Investigation of the complaint against excessive rates by the Allen Line, recently subsidized, between Canada and New Zealand, has resulted in substantial reductions. The latest communication from the Association's correspondent in New Zealand indicates that the rates have been adjusted to a satisfactory basis.

West Indies Line.

A communication from the Canada Flour Mills Company, enclosing a resolution from the District Board Office, St. Georges, Grenada, B. W. I., complaining of the withdrawal of the Pickford and Black steamers, was considered by the committee. The Manager of the Department reported that he had discussed the matter with the F. & B. Steamship Line, who explained that the calls at Grenada and Tobago had been withdrawn in the interest of securing a more frequent service between Canada and the West Indies. Traffic for these islands is now transferred at Trinidad, but no increase in freight rates has been made for this additional service. Statements ot the amount of freight handled between Canada and these points during the years 1904-1905 were submitted, together with copies of a resolution from the Halifax Board of Trade to the Department of Trade and Commerce urging that the improved service be continued. Another communication was read from Messrs. Sandbach, Parker & Co., Demerara, calling attention to the length of time consumed in the return voyages from Demerara to Halifax, which it is claimed militates against the trade from West Indies to Canada.

It was decided by the Committee to urge upon the Department of Trade and Commerce further improvements in the service between Canada and the West Indies in the way of reducing the length of time occupied by the steamers in making the voyage. The Manager of the Department was instructed to deal with the matter accordingly.

Winnipeg Switching.

The Manager of the Department reported that the complaint of the Manitoba Branch respecting switching charges had been stated to the Railway Commission at its sitting in Winnipeg on September 21st. The Commission has taken the matter under advisement.

Classification and Rate Adjustment.

The Manager of the Department reported that the complaint of the Canada Screw Co. regarding rates on castor pins had been adjusted by reducing the classification and putting these articles in the commodity tariff.

The complaint of Messrs. J. Leckie & Co. re. carload rate on sole leather from Eastern Canada to Vancouver has been adjusted by the adoption of a rate of $1.00 per 100 lbs. effecting a saving of 35 cents per 100 lbs.

Complaints regarding the classification and rating of iron articles are being investigated by the Department. Statements are in course of preparation showing the difference between the rates from various shipping points in Canada and the United States. A special committee consisting of the chairman and Messrs. Hobson and Gillies was appointed to advise with the Manager in this connection.

It was decided to hold the meeting of the committee on the second Wednesday of each month at 2.30 p. m.

TARIFF COMMITTEE.

Mr. W. K. George presented the report of the Tariff Committee. The report in part was as follows:

The Secretary reported that the resolutions passed on at the Annual Meeting had been dealt with as follows:

1. Tariff Resolution.—Forwarded to the Premier and members of the Tariff Commission.
2. Resolution re. Government Imports.—Forwarded to the Premier and members of the Tariff Commission.
3. Denatured Alcohol.—Forwarded to the Minister of Inland Revenue. In acknowledging the receipt of the resolution, the Hon. Mr. Templeman wrote as follows: "We trust to be able to meet the conditions which will follow the introduction of free alcohol in the United States. There is little doubt that the present prices can be considerably reduced even before the United States law comes into force." The Committee suggested that this resolution be forwarded to the Hon. Mr. Fielding.
4. Steel Shipbuilding.—Forwarded to the Premier and to the Finance Minister and Minister of Trade and Commerce.

The action of the Secretary herein was approved of, and it was decided that no further action could be taken to advantage at the present time.

Tariff on Railway Cars.

A communication from the Montreal Secretary, dated October 15th, together with a memorandum having reference to the duty on railway cars, and asking the Association to request the Government to have the duty increased was carefully considered.

The Committee considered, from the information before them, that the case was a good one, but decided that the Committee, as such, should not take action, but that the manufacturers should be recommended to meet and prepare a memorandum on the subject, and, if they thought it advisable, to present the same to the Tariff Commission, this procedure being in accord with the policy of the Association on all individual requests for tariff changes.

On motion of Mr. George, seconded by Mr. W. K. McNaught, the report was adopted.

TECHNICAL EDUCATION COMMITTEE.

The Chairman of the Technical Education Committee, Mr. S. M. Wickett, presented the report as follows:

"A meeting of the Technical Education Comittee was held on October 2nd to consider what steps, if any, should be taken to bring the requirements of the Dominion along the lines of industrial education to the attention of the Provincial Premiers in conference at Ottawa.

It was decided to forward to each Provincial Premier a copy of our memorial, inviting his support and suggesting that the matter might be passed upon at the conference. It was decided further to forward to Sir Wilfred Laurier the resolution on Technical Education passed by the Convention in Winnipeg, with the request that he place the subject on the agenda for the Conference. Letters were also written to influential members of the Association in various provinces requesting them to back up the Committee's efforts along the lines indicated.

While the Provincial Conference did not take any action as suggested by your committee, they feel that their efforts have at least brought the subject once more prominently to the attention of the Federal and Provincial Governments. Press dispatches from Ottawa, which could only have emanated through Government channels, indicate that the industrial needs of the country are shortly to receive consideration at the hands of the Federal authorities.

In order that the Government may feel convinced that public sentiment strongly supports our petition for a Commission of enquiry, your committee has decided to circularize the leading Canadian Boards of Trade, enclosing them a copy of the memorial with appendices to date, and urging them to pass resolutions endorsing same, and to forward copies of such resolutions to Sir Wilfrid Laurier.

Your Committee further decided to place a copy of the memorial in the hands of every member of Parliament after his arrival in Ottawa, and to send one to each member of the Provincial Legislatures when these bodies convene after the first of the year.

The pamphlet will be accompanied in each case by a personal letter soliciting their support.

On motion of Mr. Wickett, seconded by Mr. J. P. Murray, the report was adopted.

BRANCH REPORTS.

The reports of the Montreal and Toronto Branches were presented by the Montreal Chairman, Mr. J. S. N. Dougall and the General Secretary respectively, and were duly received.

The meeting then adjourned.

WOULD IMPROVE INDUSTRIAL EXHIBITION.

Members of Toronto Branch Dine and Discuss Plans for Improving the National Exhibition.

At the opening luncheon of the Toronto Branch the future of the Industrial Exhibition was discussed by a number of speakers. The gathering included many of Toronto's most prominent manufacturers, with His Worship Mayor Coatsworth as guest, and was further honored by the presence of Mr. Alfred Mosely. To those who were on the British excursion and received such kindnesses from Mr. Mosely it was a particular pleasure to greet him again in Toronto.

After the menu had been disposed of, the chairman, Mr. Firstbrook, introduced Mr. W. K. George, Vice-President of the Industrial Exhibition Board. Mr. George carried the thoughts of his audience back a few years to the time when the building which had just been destroyed contained the main part of the exhibition. He reviewed the work which had been accomplished during the past five years, the immense increase in accommodation, the superiority of the buildings which had been erected, and the general improvement shown in all branches. He also outlined the new buildings which were now projected. The Exhibition was already the best annual affair of its kind to be found anywhere, and it was able to return a sum of thirty or forty thousand dollars a year to the city. Mr. George's exposition of its position as a civic enterprise and the composition of its directorate was instructive.

The employment of a landscape artist to outline a big plan for the general improvement of the grounds was advocated by Mr. McNaught. With such a scheme once adopted, every building put up and every walk or terrace laid out would be part of the final result. Something systematic should be attempted. Regarding specific improvements, Mr. McNaught advocated the removal of all the live stock buildings to the new grounds on Garrison Commons, so that they would be in a sense distinct from the rest of the exhibits. The lake front could be greatly beautified, and the land occupied by the burned Transportation Building could be much improved. Mr. McNaught also adversely criticized the City Council for the inadequacy of the insurance on the buildings.

Mayor Coatsworth, who followed, thanked the manufacturers for the close interest they were showing in civic affairs. It strengthened the hands of the Council to have the assurance that the citizens were behind them in the suggested improvements. He dealt fully with the transportation problem, and assured those present that there would be street car connection to the eastern entrance before next fall. He opened a fertile subject for thought in suggesting that the Exhibition buildings should be utilized during the year, and not left idle for all but the two weeks during the Exhibition.

Some trenchant criticisms were offered by Mr. Ed. Freyseng. Mr. Freyseng considered the civic authorities blameworthy for the inadequate protection supplied to the buildings. Only one watchman was kept on guard, a force altogether too small for the extent of grounds and buildings to be guarded. Some interesting comparisons were made with Detroit to show how the crowds could be better handled, both on street cars and at the ticket offices and turnstiles. The speaker urged that more drinking fountains and benches be provided for the comfort of the public. There was an insufficiency also of lavatories. The Exhibition was of national importance, and so should be given every attention. The discussion then closed. The thanks of the meeting were tendered the guests and speakers for their instructive exposition of the question.

During the meeting Mr. Mosely spoke for a few minutes about his mission to Canada. He is bringing five hundred teachers from England to visit the educational institutions of Canada and the United States. He expressed the hope that before long teachers from here might visit England and benefit from the exchange of methods.

MONTREAL BRANCH.

The regular monthly meeting of the Montreal Executive Committee was held on October 11th, with Mr. J. S. N. Dougall presiding, and a large attendance of members.

It was decided to urge upon the Conference of Premiers, then in session at Ottawa, the importance of repealing the various extra-provincial taxes imposed by a number of the provincial Governments. A telegram was sent to Sir Wilfrid Laurier, requesting his personal support of the resolutions submitted to the Conference by the Canadian Manufacturers' Association.

Attention was called to the order given by some Canadian railways for cars, to be built in the United States. Members of the Branch requested that the Government be asked to see that Customs duty be collected on the full value of the cars. A request also was submitted for increased protection to Canadian car builders. The Secretary reported that he had obtained statements of the case from Canadian manufacturers, and had submitted them to the Tariff Committee, with the request that the facts be investigated.

It was decided to hold the complimentary banquet to Mr. C. C. Ballantyne on Tuesday, November 13th, in the Canada Club, Montreal. Arrangements were reported to be well under way.

NEW MEMBERS.

Passed by the Executive Council, October 25th, 1906.

BERLIN, ONT.
Foster-Armstrong Co.—Pianos.

BRIDGEWATER, N.S.
Lahave Pulp Co., Ltd.—Ground Wood Pulp.

CARLETON PLACE, ONT.
Findlay Bros. Co., Ltd.—Stoves and Ranges.

ELMIRA, ONT.
Elmira Upholstering Co.—Upholstered Parlor Furniture.

EXSHAW, ALTA.
The Western Canada Cement & Coal Company.—Cement and coal.

GALETTA, ONT.
Galetta Woollen Mill.—Woollens.

GALT, ONT.
Galt Malleable Iron Co., Ltd.—Malleable Iron Castings and Metal Patterns.

HULL, QUE.
H. Walters & Sons.—Axes.

HALIFAX, N.S.
Brander Morris & Co.—Furniture.

HAMILTON, ONT.
Allith Mfg. Co., Ltd.—Door Hangers and Hardware Specialities.
Crescent Oil Company.—Oil.
Thos. Irwin & Sons.—Galvanized Iron Workers.
Ontario Lantern & Lamp Co., Ltd.—Lanterns, Burners, Incandescent Lamps.

LONDON, ONT.
Hourd & Co., Ltd.—Furniture.

MILVERTON, ONT.
J. G. Grosch Felt Shoe Co.—Felt Shoes.

MONTREAL, QUE.
Ainslie Mining & Railway Co., Ltd.—Ground Barytes.
The Canadian Fairbanks Co.—Machinery and Scales.
Hemming Mfg. Co.—(E. H. Cooper, 2nd member).
Lamontagne, Limited.—(Jos. R. Laurendeau, 2nd member).
The Rolland Paper Co.—(O. Rolland, 2nd member).
Sadler & Haworth.—(Walter J. Sadler, 2nd member).
Standard Explosives, Ltd.—Dynamite and Powder.

PILOT MOUND, MAN.
The Dow Cereal Milling Co.—Rolled Oats, Oatmeal.
The Dow Cereal Milling Co.—(D. H. Bain, 2nd member).

PLATTESVILLE, ONT.
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The Speight Waggon Co.—(H. W. Hutchinson, 2nd member).
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Western Iron Works, Ltd.—Engineers and Ornamental Iron Work, etc.
The A. R. Williams Machinery Co., of Winnipeg, Ltd.—(W. H. Young, 2nd member).
Winnipeg Paint & Glass Co., Ltd.—(James McDiarmid, 2nd member).

Our Exhibit at New Zealand.

The New Zealand International Exhibition at Christchurch opened on November 1st. Canadian manufacturers have taken considerable interest in the Exhibition, and the Government have provided the utmost facilities for displaying Canadian products. The following is an extract from an official report of the Exhibition Commissioners:—

"Of all the exhibitors outside New Zealand—except, perhaps, the British artists—our Canadian cousins will make the bravest show. They have erected a handsome and spacious building of their own, in which will be exhibited all the varied products, industrial and agricultural, of the Dominion. It is 272 feet by 152 feet, and has been completed for some time and ready for occupation. It is a continuation of the annex to the southward of the Main Building, and has been finished with a stuccoline front, having a very handsome appearance. Inside it is lightsome, airy and spacious. Mr. Burns, the Special Commissioner representing the Dominion, is now in the colony, and arrives in Christchurch to-morrow with his staff of assistants. The exhibits are also here, and Canada, as she has been one of the first of the exhibitors to be ready with the building, will also be in the forefront in getting her exhibits into place."

Japanese Trade with Canada.

An interesting quotation from the Osaka "Shimpo," a Japanese paper, is given in a recent issue of the "Weekly Report of Trade and Commerce," of Canada. The paper is discussing the commercial treaty between Japan and Canada:—

"The commercial treaty just concluded between Japan and Canada recalls a part of the speech made by the Hon. Mr. Fisher, Canadian Minister of Agriculture, who visited this country when the Fifth Industrial Exposition was being held. The Minister observed that Japan was a land of flowers, but not of fruits; that the beauty of the cherry and the plum blossoms was incomparable, yet it was to be acknowledged that the fruits were not equal in quality to those of Canada. The criticism on that occasion was nothing but a mere representation, but he spoke of a fact, that Canada is prolific of excellent agricultural products of all varieties. All who viewed the Canadian exhibit in the last Osaka exposition might recollect how excellent it was. At the present time our trade with the vast Dominion is still insignificant, the exports and imports amounting to only a few million yen altogether. However, we may mention here that it is not long since our people began to pay their attention to that country; that it was not until after the exhibition that Japan suddenly became attractive from the Canadian point of view, even to the degree of displacing China teas with those of Japan; and with these keenly competing with the Ceylon brands. Now, the treaty having been agreed upon, we have every reason to expect trade will enter upon a prosperous era, and that it will have a greatly desired mutual success."

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1. "Five Roses" is known throughout Canada, and indeed the whole world, as the highest quality and most uniform Flour made. The fact that you handle it will give your Customers confidence in your whole stock.

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QUALITY UNEXCELLED

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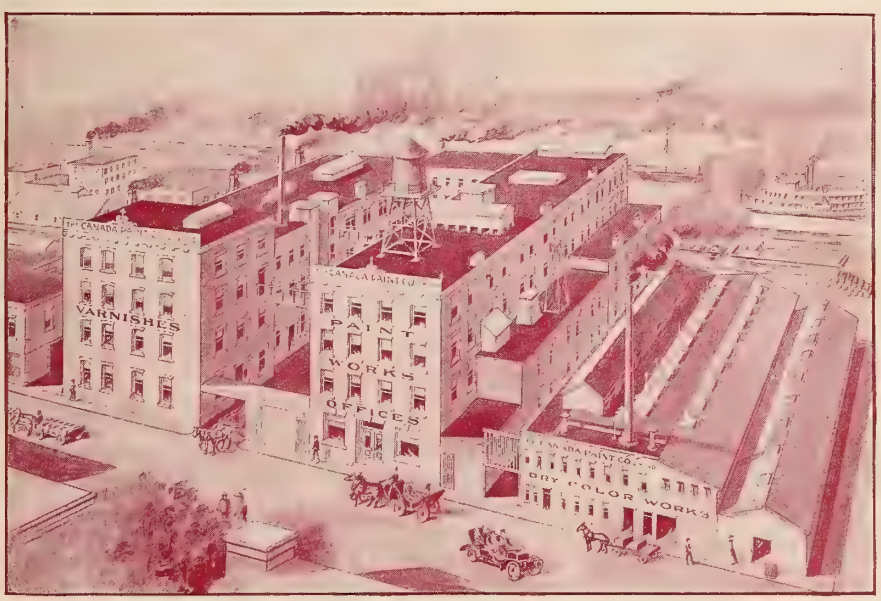
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Vol. VII. No. 5 DECEMBER, 1906 $1.00 per year

INDUSTRIAL CANADA

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88 Church st.



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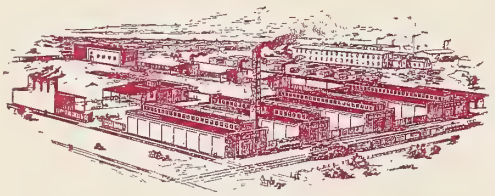
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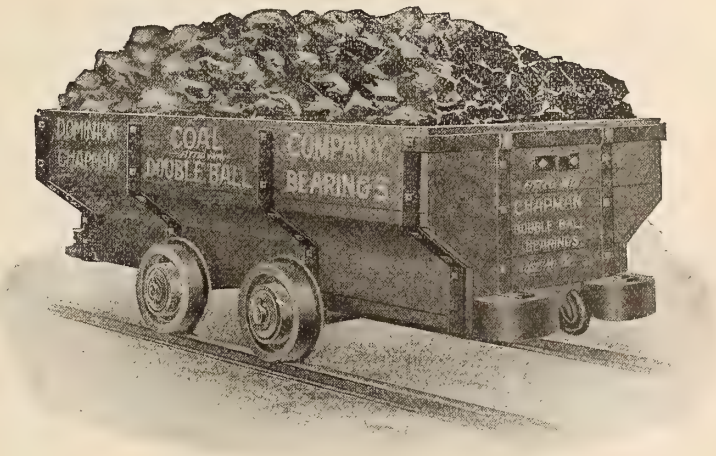
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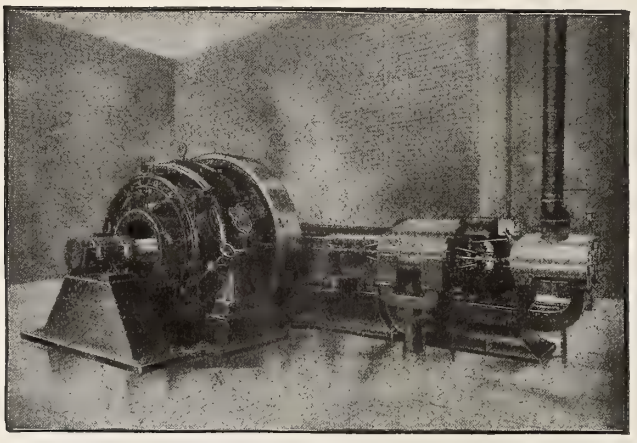
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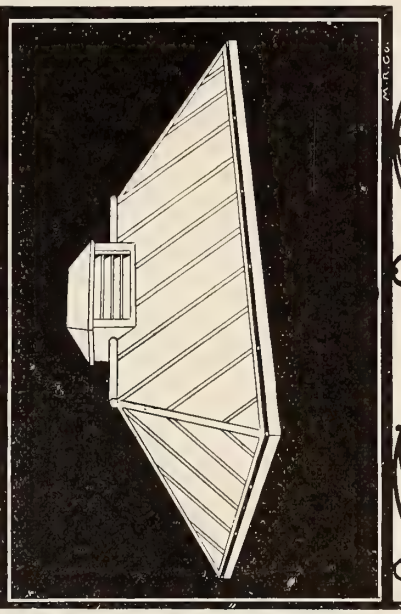
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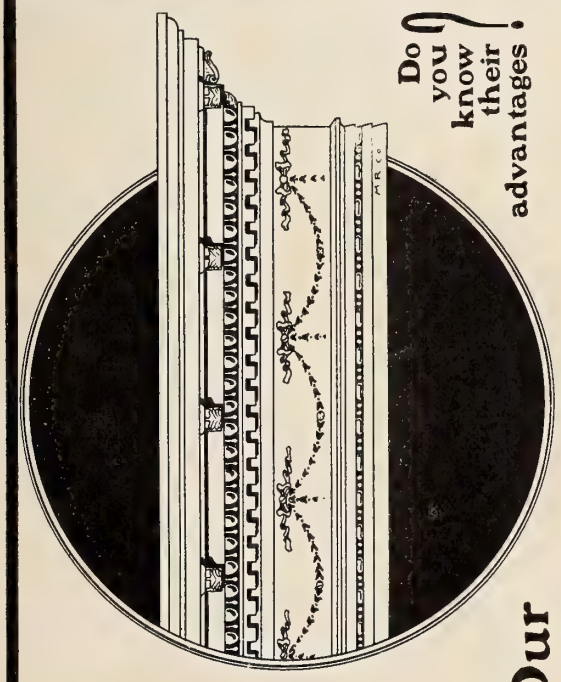
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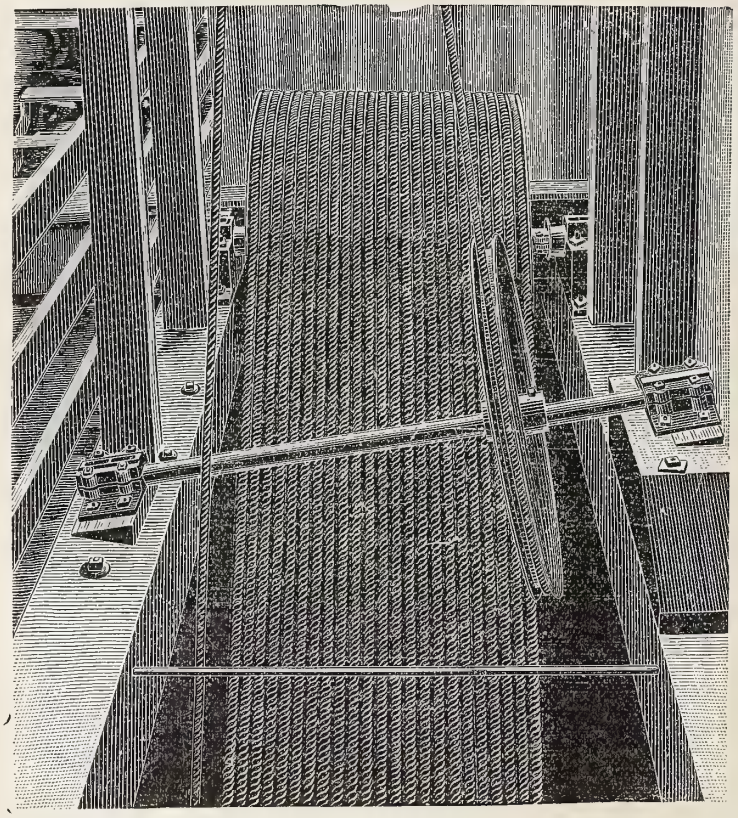
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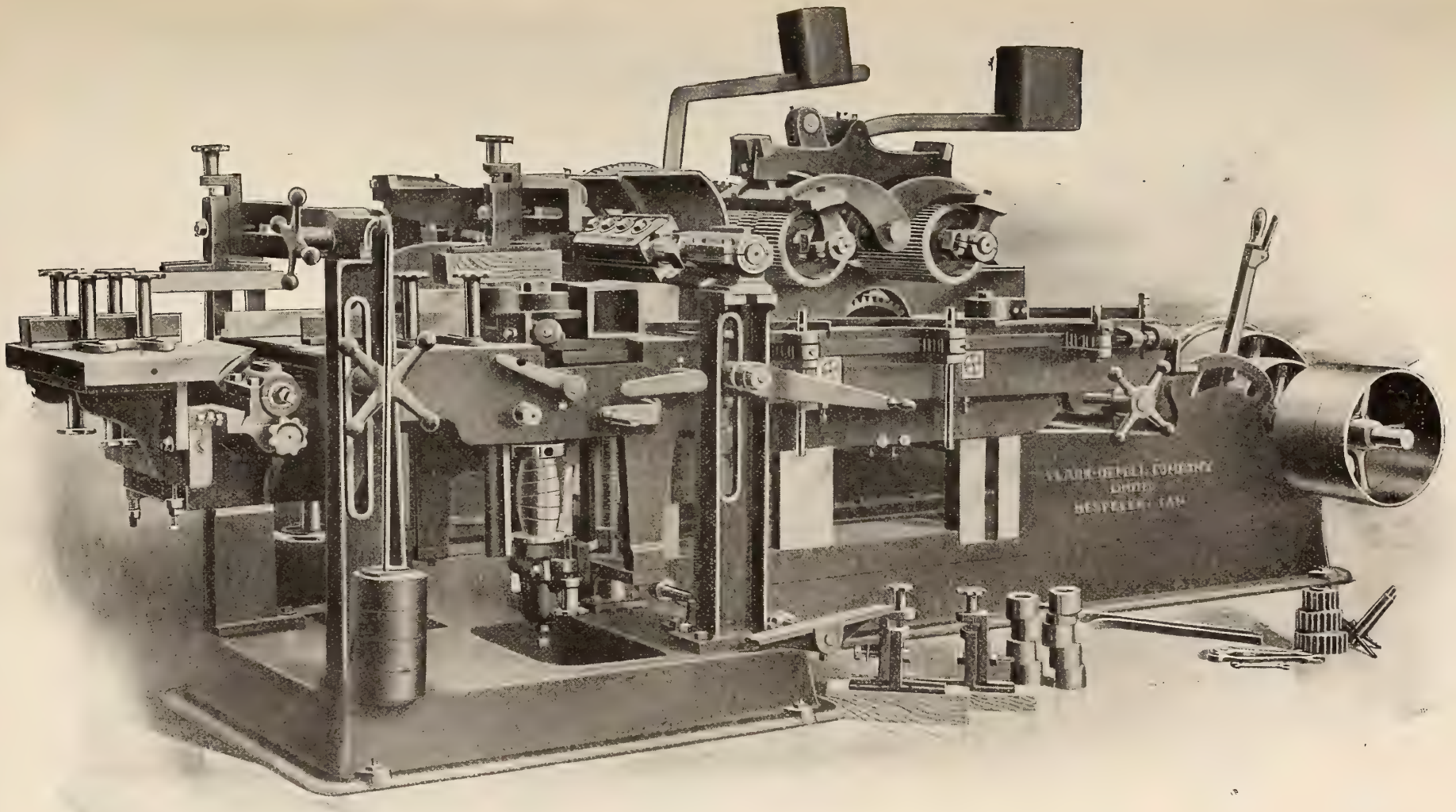
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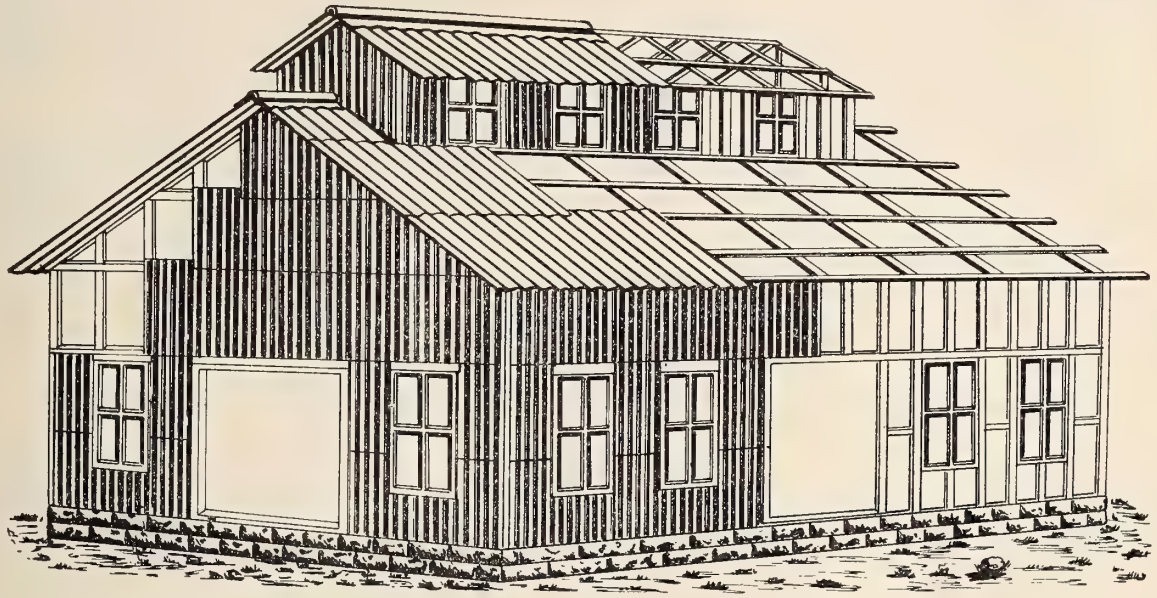
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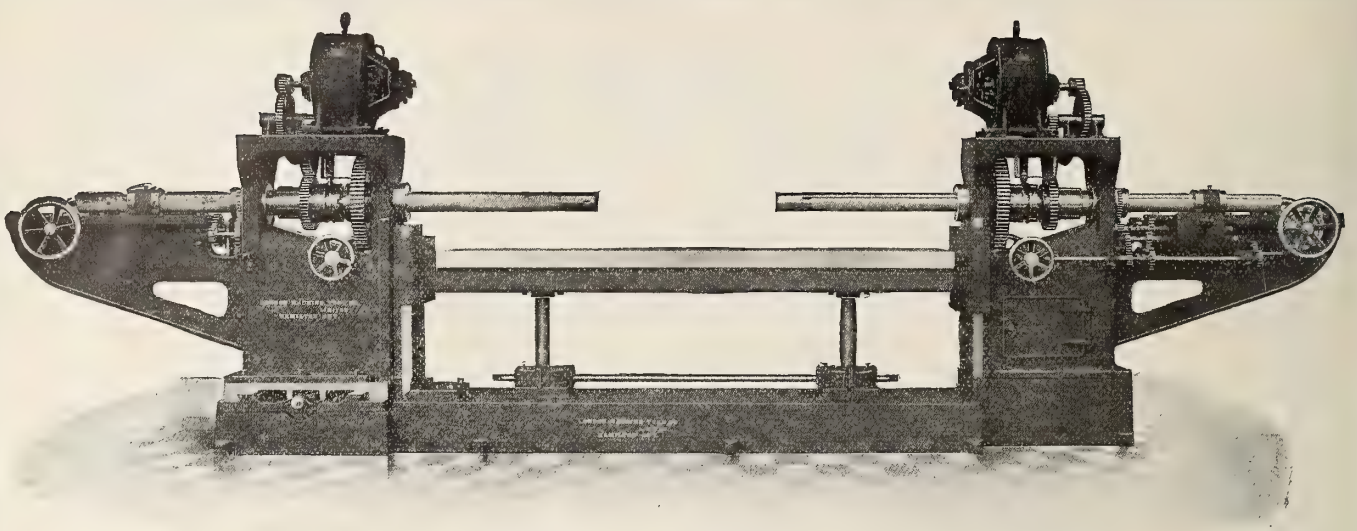
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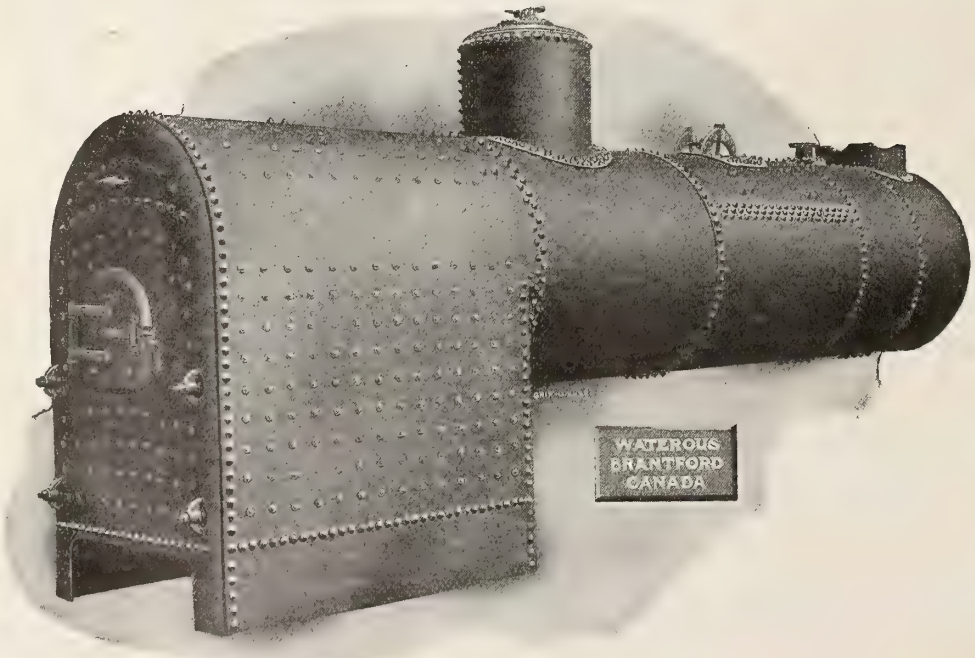
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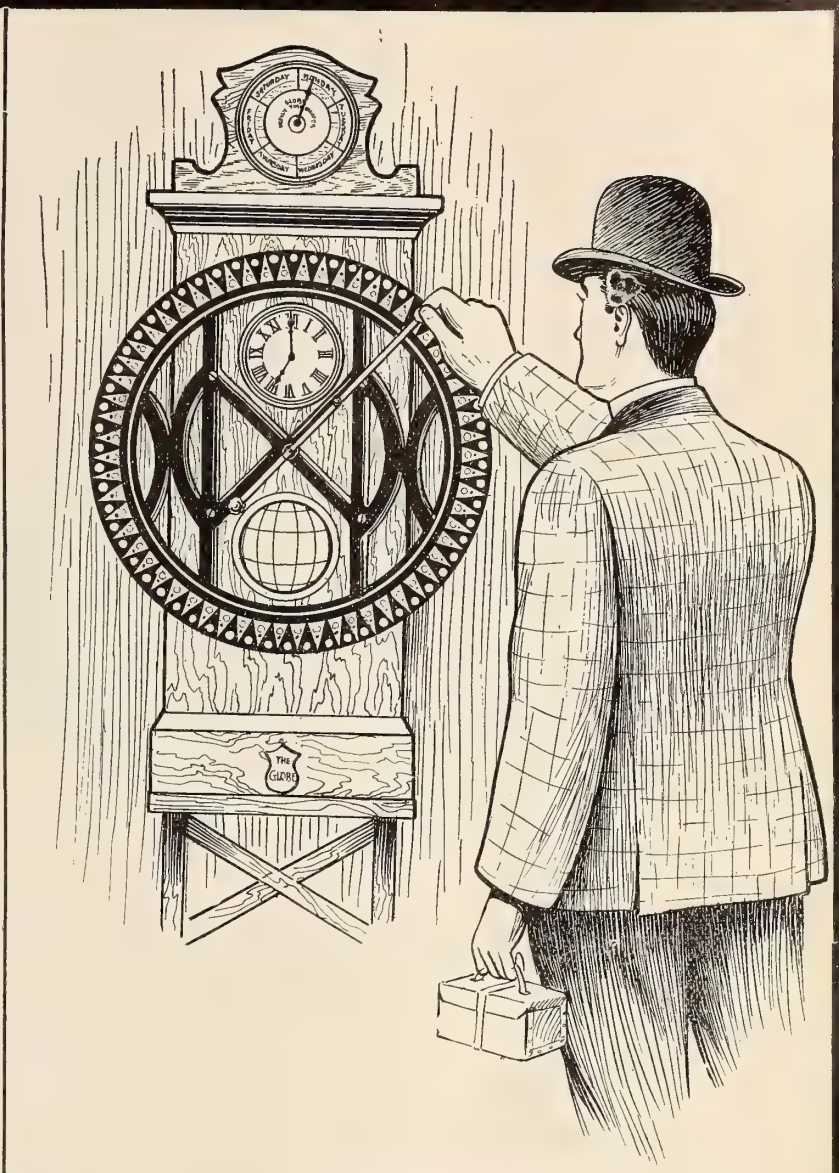
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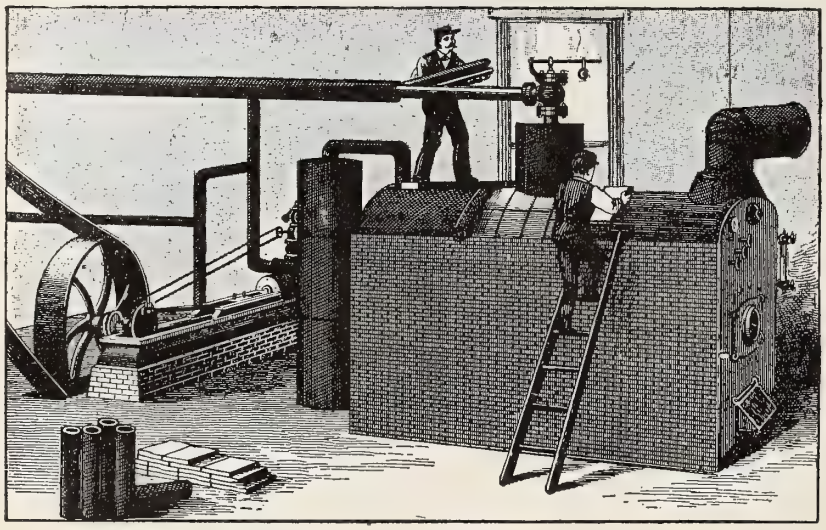
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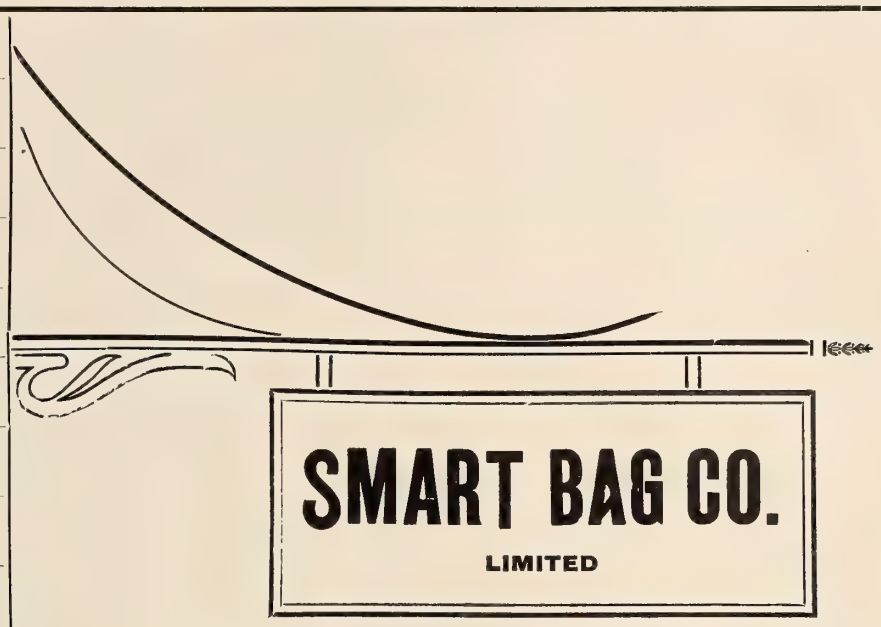
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Vol. VII. TORONTO, DECEMBER, 1906. No. 5.

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THE GROWTH OF OUR TOWNS.

ONE of the grievances which the deputation from the Farmers' Association laid before the Government at Ottawa on November 16th was the growth of the towns of Canada under a protective tariff. They said that the towns had grown very much more rapidly than the rural districts. Yet they declared that Canada had a surplus of one hundred and twenty million dollars of farm products for export. It is strange that these farmers cannot see that so long as they produce much more than can be consumed at home there is reason to desire the growth of a consuming population in the towns and cities. The leaders of the Farmers' Association have no difficulty in seeing that the cities and towns of the United States are of advantage to the farmers of that country. Indeed, they are so convinced that such markets as the big manufacturing cities of the United States are advantageous to farmers that they think the chief aim of our Government should be to obtain admission to the United States markets for Canadian farm products. Why is it, then, that they are opposed to the growth of manufacturing towns in Canada?

The people of Winnipeg, Brandon, Moose Jaw, Regina, Medicine Hat, Calgary, Edmonton and Saskatoon, who are so proud of the rapid growth of their towns should note that the free trade leaders of the Farmers' Association have asked the Government to lower the tariff on the ground that the towns are growing too rapidly. If Mr. Fielding would take the advice of the Farmers' Association there would very soon be no reason to complain that Canadian towns are growing too fast. On the contrary many towns now full of life and hope and energy would become stagnant and decline in population. But the slower growth of Canadian towns would not mean a more rapid growth of Canadian rural districts. It would simply mean a big exodus of young Canadians to the United States.

CRIMINAL NEGLECT OF MAGISTRATES.

PROTECTION of life and property is or ought to be the first duty of the State, but unfortunately the sense of duty seems to lie very lightly on the minds of some of the authorities who are supposed to see that protection is afforded. The series of outrages in connection with the piano-workers' strike at Toronto Junction, and the riotous proceedings of the strikers and their sympathizers in Hamilton show a degree of negligence on the part of the magistrate which is little short of criminal. After the strike was declared in Hamilton the company announced that they were in a position to run their cars. Riotous gatherings made the operation of them impossible. The chief of police admitted that his force was unable to handle the crowd. The company thereupon applied for military protection. This the mayor for almost three weeks refused to grant. The situation was this: the company had a franchise to run cars in the city; for this purpose they had invested large capital; they had the cars ready and the men to operate them. Why should they have been prevented from doing business for several weeks? Is a body of disorderly citizens to usurp the control of the city?

The right of employees to quit work or strike is not questioned. If conditions are not to their liking, they undoubtedly have the right to leave their employment. But this in no way justifies a resort to violence. The fundamental right of the laborer to sell his labor to whom he wishes has its corollary in the right of the employer to employ whom he wishes. The railway company in Hamilton found men who were willing to work under the conditions imposed by them. Any interference with them or with the property of the company is absolutely lawless and the pusillanimous conduct of the mayor in refusing to provide adequate protection constitutes a criminal neglect.

The case of the piano-workers in Toronto Junction furnishes an even more striking example of scandalous indifference and culpability. Here open rioting, intimidation and personal assaults have been going on for weeks and weeks. The excuse of a sudden emergency cannot be urged. Ample time has been given since the strike began to provide additional police protection to the workers. Property is being destroyed, the lives of workmen are being imperilled, and the freedom of labor is being sacrificed. Yet not a single additional policeman has been supplied by the municipality to preserve order. In default of action by the Mayor, the authority of the Attorney-General of Ontario was invoked, but still without avail. Is it possible that even those high in authority are conniving at lawlessness for political reasons?

There can be no trafficing with wrong, no yielding to or cringing before the unlawful. A man has no more right to interfere with the running of a street-car than he has to throw stones through a store window. The collection of crowds when the spirit of discord is abroad is in itself wrong. It is the plain duty of magistrates to provide proper means for dispersing such crowds and protecting property and lives.

EAST AND WEST.

HON. MR. FIELDING, in the course of his speech at the recent Montreal banquet in his honor, assumed that there is a conflict of opinion on the tariff question between the people of the West and the manufacturing interests of the East. This is not borne out by the experience of those most intimately acquainted with the West. Nor is it justified by the evidence secured by the Tariff Commission in the West. The Tariff Commission only took evidence at a few points in the West, but at the majority of the places visited deputations appeared asking for further protection. It is true that there were also deputations asking for a lower tariff, but this was equally true in the East. In Winnipeg a deputation of about thirty local manufacturers asked for further protection, advancing strong arguments to prove that the West had great natural advantages for manufacturing. The Commission did not call at Medicine Hat, but the Board of Trade of that town sent a memorial to the Commission asking that the Canadian tariff be made as high as the United States tariff, and expressing the opinion that, as Medicine Hat could offer cheap coal, cheap natural gas and cheap raw materials to manufacturers, many American manufacturers would establish branch industries there if the tariff were made high enough to thoroughly protect Canadian industries. At Calgary the Tariff Commission learned that the farmers of Southern Alberta wanted protection for wool. At Edmonton they heard a deputation of farmers from the Wetaskiwin district, who not only made a strong appeal for protection on farm products to prevent United States farm products from being sold in the mining and lumbering camps of Alberta and British Columbia in competition with their own products, but also pointed out to the Commission the necessity of creating a home market in Alberta by developing manufacturing towns owing to the great distance of Alberta farms from the world's chief markets.

On September 30, 1906, when the Canadian Manufacturers' Association excursion party visited the town of North Battleford, Saskatchewan, an address, signed by the mayor and council and the president and secretary of the Board of Trade, was read by the mayor. It pointed out the advantages of North Battleford as a site for manufacturing industries, and said: "Representing as you do the manufacturing interests of the country, we feel sure that your trip through Western Canada will prove highly beneficial, both to our Dominion and to yourselves. We recognize the truth that, in order to become a nation in the true sense of the word, Canada must not only have developed her rich agricultural resources, her mines, her forests and her fisheries, but she must also have manufacturing industries established to assist in this development, and to provide employment for her own artisans, and make her a truly self-supporting nation, with work and opportunity for all the people."

It is a well-known fact that some of the strongest appeals for higher protection came from British Columbia.

Then it should be noted that in the days when the question of protection or free trade was the issue between the two political parties the great majority of the constituencies of the West supported the protectionist candidates. It may be charged that the influx of American farmers has changed the attitude of the West, but in reply to this it can be shown that the great majority of these American settlers supported the Republican party, the party of high protection, while in the United States. As to their present attitude it may be worth while to quote the opinion of Mr. H. Locke, an expert agriculturist, sent to the Canadian West by "The New York Farming," one of the leading agricultural journals of the United States. After traveling through the West, talking to American settlers and taking notes, Mr. Locke came to the conclusion that nearly all the American settlers in the Canadian West were in favor of putting up a high tariff against the United States, in order to develop manufacturing towns near their farms. Mr. Locke cannot be said to be prejudiced by Canadian politics, and the fact that he traveled through the Canadian West as the representative of an American agricultural paper gives peculiar value to this expression of opinion. Mr. Locke believes that the American settlers in our North-West will become ultra-Canadians. One of the best ways to make them so is to create manufacturing industries in the West which will build up towns and cities that they can be proud of—towns and cities which will afford a home market for their products and give employment to those of their sons who do not wish to remain on the farm.

As the natural resources of the West become better known the mistaken idea of a conflict of interests between the West and the East will disappear. The same policy is required for the development of Western resources as for the development of the East.

THE HUDSON'S BAY ROUTE.

THE recent statement of Hon. Rodolphe Lemieux that the Hudson's Bay route is a thing of to-morrow, has added new fuel to that controversial fire. With the exception of Manitoba it may fairly be said that the question of additional territory does not appeal to the provinces. The essential point in every case is the acquisition of a port on Hudson's Bay.

The discussion brings out clearly the wonderfully fine natural location of Canada in regard to water transportation. The St. Lawrence and Great Lake system, stretching into the very heart of the continent, is already of immense importance in providing cheap transportation. When the route is made safer, the canals deepened, and the harbors improved, its value as a factor in our industrial development cannot be overestimated. It requires a very small difference in the cost of transporting wheat from the West to place us at a disadvantage in competition with other wheat-growing coun-

tries. To obtain the benefit of cheapest rates it is necessary to get the grain out while water routes are available.

These are the considerations which make the addition of the Hudson's Bay route so important to Canada. The fish in its waters are undoubtedly numerous and valuable; there are mineral lands of unquestionable worth near its shores; but these facts sink into insignificance before the great problem of cheap transportation for the grain of the West. The extension of the northern limit of the wheat belt hundreds of miles beyond what it was considered to be only a few years ago, will immensely increase the amount of grain to be moved each year. This will still further congest the traffic on the Great Lakes. The farther north agriculture is pushed the greater will be the saving in distance afforded by the Hudson's Bay route.

Unfortunately the natural harbors on the great inland sea are very few. The mouth of the Churchill River is the only first-class harbor at present known. Hence any extension of provincial territories which does not include Fort Churchill would be considered a barren gift. However it is the national aspect of the question which will appeal to most people. A sea-port on Hudson's Bay, through which the cost of transportation is decreased, will be a national asset. The trade and commerce of Canada are under federal jurisdiction. If the proposed route to Europe is feasible, we trust that no dispute over the control of territory will delay its consummation.

PERMANENT SAMPLE ROOMS IN NEWFOUNDLAND.

MR. E. D. ARNAUD, the Canadian Government Commercial Agent in St. Johns, Nfld., has called to the attention of the Canadian Manufacturers' Association an effective method employed by United States manufacturers for selling their goods in Newfoundland. A number of manufacturers get together and appoint one representative. This representative opens a place of business in Newfoundland for the purpose of displaying a full line of the goods which he has for sale. Mr. Arnaud forwards information about two of these sample rooms. The rooms are kept open all the year round, and the proprietors visit Newfoundland twice a year for about two months on each occasion. In their absence the rooms are in charge of local attendants. In the rooms are displayed a great variety of goods, which are renewed from time to time, and include hardware, dry goods, boots and shoes, chinaware and fancy goods of all sorts. Mr. Arnaud is given to understand that the parties interested have been well repaid for their trouble and expense.

The suggestion is one well worthy of consideration by Canadian manufacturers. A large number of Canadian firms have their travellers going regularly to Newfoundland. Would it not be better if they were to establish a permanent sample room and enquiry office? At present the average traveller does not represent more than one or two lines of goods. Were the same man to open a permanent office and make an extended stay in Newfoundland he could probably represent twelve or fifteen to advantage. The manufacturer who is represented twelve months in the year has an advantage over the manufacturer who has his goods pushed for a week, spring and fall. The expense of such an undertaking, when divided up either according to the business done or according to the number of firms represented, would be small.

INDUSTRIAL CANADA would be glad to hear from any manufacturers who would like to look into this question further, and offers its services to put the different manufacturers who are interested in touch with each other.

WHAT IT MEANS TO THE POLITICIANS.

THE deputation of free trade farmers who recently visited Ottawa stated as an argument in favor of reducing or eliminating protection that in Manitoba rural population shows an increase for the ten years ending with 1900 of five per cent. less than the increase in urban population; that in Ontario rural population decreased in the ten years by over 3¾ per cent., while urban increased by 14¼ per cent., and that in Canada, as a whole, the rural increase was 1½ per cent., while the increase in cities, towns and villages was 31½. The report of the Bureau of Industries is cited at showing a decline of twenty-seven thousand in rural population in Ontario between 1900 and 1904, while city and town population increased from seven hundred and ninety-four thousand to eight hundred and eighty-seven thousand. It was also stated in Manitoba, where population increased by 100,000 between 1900 and July last, about eight-tenths of the increase was in cities and towns. Now what does this mean to the politicians? It means that any political party that threatened to wipe out protection would incur the hostility of all these towns which are being built up by protection. Nearly every rural constituency in Eastern Canada now has at least one manufacturing town or village, and the same condition of affairs is rapidly coming about in the North-West. There may be difference of opinion as to whether the majority of the farmers believe in protection or free trade, but there is no doubt that many of them are convinced that protection is as much in the interest of farmers as of manufacturers, and it is certain that the great majority of the people in the manufacturing towns are protectionists.

We think that the Government and the majority of the members of Parliament now believe that protection is the true policy for Canada, but the free trade newspapers are trying to scare the politicians with the bogey of an adverse farmers' vote if they do not lower the tariff. Canadian statesmen should shape their policy in the interests of the country at large, but those of our politicians who are disposed to look at the question merely from the standpoint of political expediency should take into consideration the fact that in most of the rural constituencies the manufacturing towns will soon hold the balance of power if they do not already do so.

BUSINESS, NOT CHARITY.

SOME people have been inclined to throw cold water on the proposal to build homes for workingmen in Toronto, saying that it smacks too much of charity, and would for that reason be resented by the workingmen themselves. It must be admitted that conditions exist among the laboring classes in certain quarters of the city which, were they generally known, would make it a comparatively easy matter to enlist the support of philanthropic citizens. Few, if any, of those who are behind the scheme, however, have become acquainted with the conditions at first hand, so that much as they might like to, they cannot take credit for being swayed by motives of pure philanthropy.

With them it is a business proposition pure and simple. Every employer of labor knows that advancing rents are one of the biggest factors in bringing about an increase of wages. Higher wages in turn mean an increased cost of production. As the cost of production increases, the capacity for meeting competition from the cheap labor centres of the Continent naturally decreases. If our tariff were only as elastic as the cupidity of our landlords, there would be little in the situation to cause the manufacturer any con-

cern, for he could keep on increasing wages indefinitely, and always protect himself by adding a little to the tariff. But there is a limit to all protective tariffs, and consequently a limit to all wages. When that limit comes into view and begins to threaten destruction, it behooves the manufacturer to throw out an anchor, and the surest way to anchor wages is to anchor the rental of the houses in which the wage-earners live. The problem from the manufacturer's point of view thus resolves itself into one of dollars and cents.

If the proposition now being mooted is destined to be carried through to a succesful conclusion, it will only be because it appeals to business men as a business undertaking. Mere sentiment and humanitarian motives will not build houses—it takes money, and it may be assumed that the man who puts up cold, hard cash is tolerably sure that there is going to be an adequate return. That return need not necesarily be in the form of cash interest on his investment. Dividends of that kind will, it is hoped, be very meagre, indeed, for the purpose is to make the burden on the workingman as light as possible, and to increase the attractiveness of the building proposition to him. But adequate returns will be forthcoming in the way of more stable wages, more contented employees, greater freedom from labor troubles, and a bigger and more prosperous city.

THE MOVEMENT FOR CIVIC REFORM.

THE action of the leading public organizations of Winnipeg in uniting to secure strong municipal Government marks a definite movement in the same direction, which is spreading throughout this continent. For many years the best men of the communities have been diffident about taking an active part in civic affairs. Too often the less scrupulous demagogue has succeeded in having himself elected as the people's representative. The business man and manufacturer, becoming engrossed in their own affairs, have to a large extent withdrawn from active participation in municipal work. The effect has been disastrous. Spendthrift councils have frittered away the resources of the people, important franchises have been thrown away, and public works of real necessity have been neglected.

Citizens have come to see the effect of leaving the control of civic government to incompetents. This has been brought to their attention particularly by the increasing burdens of taxation, the inferior service in public utilities, and the incapacity of councils to provide for the bigger questions which press for settlement as the cities grow. Modern conditions have become so complex that great wisdom and foresight are necessary to meet them.

However, the very growth which is the chief cause of the necessity for better civic government also makes that better government more difficult. As the population increases it becomes more and more difficult for the citizens to know the qualifications of candidates for office. A man is not elected on his merit, but on the amount of influence he can bring to bear on various sections of the electorate.

Hence, a movement such as that recently inaugurated in Winnipeg, which has for its object the bringing out of strong men for public offices, is highly commendable. The number of bodies which interested themselves in the reform make the election of their choice certain. A good man, therefore, can come out under their auspices without fear of defeat. The next few years in Winnipeg will require all the wisdom of its best citizens to work out a future commensurate with its possibilities.

EDITORIAL NOTES.

Mr. Graham Gow, the New Zealand Trade Commissioner, is in Canada investigating the possibilities of increased trade between the two countries.

Are we to believe, that as a consequence of Mr. W. L. Mackenzie King's trip to England, it will be a high crime and misdemeanor to state there is a demand for laborers in Canada?

"I wish I were a young man again. This land is just at the dawn of a magnificent future."—Sir Wilfrid Laurier. The splendid faith of the Premier in Canada's future is one of our greatest national assets.

While the Government is continuing to pay a bonus to agents for bringing men without skill to Canada, the H. Corby Distillery Company is summoned to court for adding to the population a number of expert coppersmiths.

Boards of Trade from one end of Canada to the other are joining the Canadian Manufacturers' Association in its efforts to have a commission on Technical Education appointed by the Federal Government.

The action of the Pickford and Black Steamship Company, in inviting representatives from a number of Canadian Boards of Trade to make a tour of the West Indies, is commendable. It is believed by those who have investigated the conditions, that a beneficial mutual trade can be developed between the two countries.

In a recent interview Mr. Bruce Walker, Canadian Immigration Agent in England, said that the Canadian Government would not encourage the immigration of skilled mechanics. "I am not in a position to deny that trade unions would say something if we took a different course," he added. What would be the effect on Canada's future if our agriculturists took a similar stand?

Canada is not the only part of the empire where taxes on commercial travellers are enforced. In New Zealand foreign travellers, before starting to do business in the Colony, are required to make a deposit of £10 at the Custom House. Then on the net profit of all orders taken, a list of which must be forwarded to the Customs, a tax of 2½ per cent. has to be paid. The deposit, of course, is made to cover this tax. If on the traveller's departure the £10 is found to be in excess, the balance will be returned, or if too little the balance to make up the tax must be paid. It is to be hoped that the blame for this legislation does not rest with the Canadian provincial legislators who have set the bad example.

There are said to be in Canada at the present time fully four hundred and fifty thousand farmers. Ten thousand of these farmers have signed a petition against increased protection. How about the other farmers? No doubt a considerable proportion of them would sign a petition against protection if urged to do so, but it is certain that a very large proportion of them would not. The farmers of Canada are divided in opinion on this question, and it is impossible to say positively on which side the larger number of farmers are arrayed. This much only is certain: it is an undeniable fact that when the two political parties were fighting over protection the protectionist candidates were elected in a large number of rural constituencies.

How Some Difficulties in Exporting Goods may be Overcome.

The Forwarding Broker as an Element in Export Trade.

BOTH in the United States and Canada manufacturers have until recently devoted almost their entire attention to the home market. It is only within the past few years that they have begun to reach out and contest with the older manufacturing countries of Europe the world's markets. Consequently, exporting facilities which in England and other European countries have become thoroughly organized, are on this continent not fully recognized.

There are undoubted difficulties in an export trade. Granted that the market has been found and sales made, there are still the obstacles of transportation to be encountered. These can in most cases be narrowed down to the lack of a personal agent at the sea-board, to see that the goods go forward in good condition. The biggest exporters, such as the United States meat packers, have their own representatives to handle this business. For shippers whose business does not justify them in this expense, forwarding brokers, who assume all the duties of a personal agent, are available. Canadian shippers have not generally taken advantage of these brokers, although in Europe practically all export trade is done through them.

CANADIAN Manufacturers are no longer satisfied with the home market; they are seeking business in the markets of the world.

To do an export trade satisfactorily the utmost economy in time and cost is necessary.

How the various difficulties which come up in transportation may be anticipated and met is discussed in the present article.

Present Methods of Exportation.

A large part of Canadian exports of manufactures goes forward through the port of New York. The customary method, particularly in the case of small shipments, is to get a through bill of lading from the railway company, and trust to the company to get the goods transferred from the cars to the boat, and to the steamship company to deliver the goods to the consignee. The Canadian exporter shipping his goods, for instance, to South Africa, hands them over to the railway company. The company carries the goods to New York in bond. When they arrive in New York the Customs requirements must be complied with before the bond given by the railway company is cancelled. Accommodation then has to be provided on some boat; a steamship permit to haul the goods on to the pier must be secured; to reach some steamship berths, ferry service is also necessary; proper export entries must be made, and it is essential that bills of lading, etc., be correct. All these arrangements the exporter leaves to the railway company.

The charges at New York are a fruitful source of trouble. The railway company has freight charges; it may have storage charges; there is, too, the cost of trucking and ferrying the goods to the boats. The railway company will not let the goods out of its hands till the charges are paid; sometimes the steamship company, unless the consignor is very well known, will not advance these charges. As a consequence the whole shipment is held up till communication is held with the shipper and the charges arranged for. This delay may be just enough to cause the shipment to miss a boat, which in some cases means a month's delay before the next boat sails. As goods are shipped frequently for use during a certain season, the delay of a month may cause the loss of a sale.

Where the Forwarding Broker Appears.

When goods are shipped through a broker they are forwarded in the usual way in his care. Where the broker has a local representative the shipping papers may be turned over to him at once. If this is not done, the shipping receipt is sent to the broker's office in New York. The agency at New York, with its large expert staff, hands over the receipt to the man who is in charge of the freight of the forwarding railroad. As soon as the shipment arrives he takes charge of it. He sees to the cancellation of the bond. He arranges for the trucking of it to the pier. He has already, as soon as he has received the receipt, and before the goods have arrived, reserved space in the most suitable boat and taken out a permit allowing him to have the goods brought to the pier. He is personally acquainted with the Customs laws of the nations to which exports are sent, and he knows fully how to complete export entries, Customs requirements, etc. All these are details which, unless they are carried out accurately, will cause endless delays and troubles, yet which are extremely simple when entrusted to an expert.

Difficulties with Small Lots.

There are times when there is more cargo offering a boat than she can carry. When this occurs, if the steamship's interests alone are consulted, the car load lot gets preference over the broken lot. Where the consignor has no personal representative on the spot to see that his shipment gets its place in the boat's cargo, it may perhaps be sidetracked for the bigger blocks. The rate for the small lot, too, will be higher than for round lots. The company doesn't want to be bothered dealing with a number of little shippers when it can complete its cargo from a few big shippers. The broker overcomes these difficulties. He has a few hundred pounds from one consignor, a car load from another, and varying sized lots from thirty or more individuals. He goes to the steamship company with a big quantity, gets more favorable rates, reserves space en bloc, and transfers the whole consignment, consisting of small lots from many shippers, to the boat as a single shipment from himself. The company gains by having to deal with

just one individual, who has a large amount of freight to place. The broker gains through the business he handles. But the consignor gains most of all by getting his small packages, that otherwise might have been neglected and delayed, included in a big shipment, which gets prompt consideration at minimum transportation rates.

Personal Attention at Sea-board.

The personal attention given to shipments by the broker is the important point. It is his whole business to get the goods put in his charge forwarded in the most satisfactory manner possible. The railway company has a great number of patrons and an immense amount of freight constantly moving. There can be no personal attention given to individual shipments. Unless all the requirements are complied with the company will hold the freight. Any one of the several details which must be completed will be enough to delay the shipment for days.

Neither will the steamship company bother itself about small lots. If they are brought down to the pier and put on board the boat they will be carried, but unless all the papers are in shape the company will not receive them, especially when big consignments are available. The latter are preferred and are given precedence.

Broker Always has Freight Offering.

The broker has a distinct advantage in dealing with steamship companies, in that he always has freight to offer. His numerous consignments, even if they be individually small, together make up desirable cargoes. Hence, the steamship companies are well disposed to him, and grant him the best terms and service. This is a distinct advantage to the small shipper, who gets all the benefits in reduced rates and increased service.

Ocean rates are a commodity which varies from day to day. Many things influence them. The amount of freight offering is one important factor; immediate competition is another. For instance, there is a line which leaves New York direct for Australia once a month. At other times during the month shipments are made to Australia by sending them to Liverpool and transhipping thence to Australia. Just before the time of sailing of the direct line the rates via Liverpool are reduced to meet those of the direct route. When the boat leaves and the competition is temporarily removed, rates via Liverpool go up again. How many Canadian exporters to Australia take advantage of these competitive rates?

How Best Rates are Secured.

This is what the broker does. He goes to the Shipping Exchange, where the representatives of the Transportation interests meet and fix rates. All the important brokerage agencies are members of this Exchange. There he finds out the rates which are offering, the general conditions which are likely to influence them up or down in the near future, the competition, etc. He is right on the spot to watch developments. If rates are going down, he holds off his freight till he feels that he has got the best price. He then makes his reservation. If prices are rising he reserves his space at once. In the case of Australian exports he waits for the direct steamer, unless, of course, the order requires haste in shipment. In every case he is in the best possible position for getting the lowest rates to be had. Without a representative or broker at the seaboard, the exporter's shipment would go forward on whatever boat offered, irrespective of rate, and frequently at a distinct loss to him.

The Cost of Insurance.

Insurance of the goods in transit is a matter of importance. If a boat carries certain classes of goods the insurance on the whole cargo is greatly increased. When an exporter sends his shipment forward on a through bill of lading, he may not be sure what the boat in which his goods move will carry. Hence, he cannot figure on what his insurance will cost. The large brokers have a common floating rate by which they effect insurance irrespective of the kind of cargo. Hence, they can state in advance exactly what this charge will be.

Even after the shipment leaves the port the work of the agency continues. The steamship company has fulfilled its obligation when it lands its cargo at the port of destination. Where a brokerage agency is employed its representative meets the goods and sees that they are actually delivered to the consignee. Where charges in transit have been met by the broker, his collection of these depends on his handing over the goods in a satisfactory manner in regard to time and condition.

Personal representation or a forwarding broker at the seaboard is a necessary element in a successful export trade. Without him, delays will occur which will interfere with business. Responsibility will be shifted from railway company to steamship company, and vice versa. Papers will be incomplete and entries omitted. More particularly small shipments will be neglected in favor of larger blocks. The broker provides the means of overcoming these difficulties and puts the small exporter on the same footing with the large one.

Pulp Supplies

In his report to the Department of Trade and Commerce, Lord Strathcona gives an extract from a correspondent, dealing with Canada's position as a source of supply of pulp, as follows:—

"The shortage of water in Canada and other pulp-making countries, and the consequent scarcity of pulp increasing as the months went on, has greatly enhanced the value of paper. As a result the consumption was curtailed, newspapers running on as small sizes as they could, so that there has not been the usual natural increase that one looks for. Despite the shortness of supply the prices here have gone up comparatively little. There can be little doubt that Canadian makers of paper will find this an excellent opportunity of increasing their hold on this market, especially in "News," as there is likely to be a considerable shortage in the Scandinavian supply this year, and, so far as one can see, in American supplies also, so that the newer country, with its more natural and abundant resources of raw material, has now an opening to secure a much larger share of the trade of this market. Prices of paper seem likely to be maintained this year at the present level as a minimum, and should not the Scandinavian supply of ground wood be speedily augmented, in all probability we shall see high prices. I shall be glad to know that developments in Canada are taking place to enable her to secure a fuller share in supplying the needs of this market, especially in "News" and "Sulphite Pulp," which are practically the only two remunerative branches of trade."

Another gentleman largely interested in the pulp trade warns Canadian business men not to think of putting down mills for "mechanical" pulp unless they are within cheap reach of a port, and unless wood is to be obtained at a price of not more than $4 a cord on the boom. As regards "sulphite," there is a bigger chance for development even higher up the country, but wood should not cost more than the figure named.

TRAINING BOYS TO BE EFFICIENT WORKMEN.

System of Apprenticeship in Force in the Shops of the Grand Trunk Railway.

THE form of apprenticeship which has been adopted by the Grand Trunk Railway System has been in successful operation for a number of years and has been the means of supplying that company with skilled mechanics in the most satisfactory manner. All apprentices are indentured to Machinist's Trade for five years, and to Blacksmith's, Boilermaker's, or other trades for four years. Five cents per day is deducted from the wages of each apprentice, and the total amount is returned to him at the expiration of his apprenticeship with an addition of $25 as a bonus if services have been entirely satisfactory.

The first requisite in employing an apprentice is to know that he is morally, physically and mentally capable of filling the requirements of a mechanic. To ascertain this the apprentice is required to make his application direct to the Master Mechanic or the General Foreman, and to be not under 15 or over 18 years of age. He is required to undergo a medical examination so as to assure the Head of the Department that he is healthy and likely to be able to follow up the trade after he has completed the term of apprenticeship.

TO provide a corps of efficient workmen is as necessary for the manufacturer as to supply good steel and wood and modern machinery.

Complaint is constantly made that the supply of skilled workmen is short and that the majority are incompetent. The situation has become more than serious; it is critical.

The present article describes the system in force with one company, for educating apprentices and keeping up a constant supply of competent mechanics.

Examination of Applicants.

This information being satisfactory, he has to pass an examination in the Master Mechanic's or General Foreman's office. This is usually conducted by the Chief Clerk or some person specially appointed for that purpose, as follows:

To be able to read extracts from instructions at end of employees' train time-table, as, per example, standing thirty inches from same:—

> All apprentices of this Company must be able to read the rules readily. Regulations are published from time to time and workmen are expected to acquaint themselves with them.

Hearing—

To be able to hear the ticking of an ordinary open face watch at a distance of four feet.

Writing and Spelling—

By writing a letter, from dictation, applying for employment in the shops, as, per sample:—

Mr. .....

.....

DEAR SIR,—

I am desirous of entering the service of the ..... Railway as an apprentice in the shops at ..... I am ..... years of age, and in good health and free from bodily defects. When I left school at ..... I was in ..... grade (or form). Since then I have been employed as follows:— ..... Should you accept this application, I will promise faithfully to conform to the rules and regulations of the ..... Railway, and try to become a first-class mechanic.

Yours truly,

.....

Arithmetic—

To be able to work out correctly similar examples to the following:—

Multiply 122,983,672 by 527,001.
Divide 723,643,978 by 365.

The foregoing examples are sufficient to show whether or not the applicant has a general knowledge of the simple elements of arithmetic.

The applicant is required to write this examination out on foolscap paper, and if satisfactory it is copied by him into the record book kept in the Master Mechanic's or General Foreman's office, so that a complete record of the boy's ability is on file from the day he first enters the service

Books for Further Instruction.

The apprentice after having passed a successful examination is provided with a text-book for his instruction and guidance. This book contains examinations for the apprentice for each promotion he takes while serving his apprenticeship, and if he fails in any of these examinations he is set back to his old position for another term and the next apprentice in turn is promoted ahead of him, provided the next apprentice passes a satisfactory examination. When another promotion is necessary the apprentice who failed is given another opportunity to qualify. If he fails the second time he is either dismissed from the service or given some minor position he is capable of filling outside of the trade, as it is concluded that he is either not sufficiently intelligent or too indifferent to make a mechanic.

After passing the first or entrance examination in the Master Mechanics' or General Foreman's office the apprentice is sent out to the boiler, blacksmith or coppersmith shops, or other shop as may be required. He stays there from six to nine months, and is taught to be active and obedient, and to prepare himself for future promotions.

Four or Five Year Course.

When a boy is to learn one branch of the business only, for instance, boilermaking, blacksmithing, steam-fitting, etc., he is only required to serve four years, but if he is to learn

the machine work and fitting, he is required to serve five years and all the machinists' apprentices are indentured for five years. In the case of any apprentice learning the boiler-making or blacksmithing he is required to pass an examination in the Master Mechanic's office and the first examination in the apprentices' rule book, as it is deemed necessary to have the information contained therein for any branch of the service, and in case of these four-year apprentices being few in number, after the first examination, in comparison to the machinist's apprentices, they are instructed in their business by the foreman in charge, and each year they are required to pass an examination in drawing before receiving their advance in wages, the same as machinist's apprentices.

Compulsory Night Classes in Drawing and Mechanics.

The apprentices in the employ of the company are required to attend a drawing class, also a class in applied mechanics, for six months in the year, from October to April, and there are few absentees. Attendance at these classes is compulsory, and a satisfactory explanation must be given by any apprentice who is absent on any night. The instructors, light, room, etc., are furnished by the company free of charge.

Prizes for Best Work.

In April each year examinations in drawing and applied mechanics are held over the entire system. The papers for these examinations are gotten out by the Chief Draughtsman at Montreal, and the company gives prizes for each class of apprentices at the different shops, i.e., a prize for each successful competitor in the 1st, 2nd, 3rd, 4th, and 5th year apprentice examinations. Then there is one general class prize given for the whole system, the class obtaining the highest number of marks being awarded the prize. There is also an individual prize for apprentices getting the highest number of marks over the system. These competitions are of great benefit, as they inspire keen rivalry among the boys, and instances have been shown where apprentices will not only attend the instruction classes on the two nights during each week as specified, but will also put in considerable extra time to advance their studies.

This method results in a number of first-class students who are prepared to act as draughtsmen in the local shop offices, and who are much more competent than any outside draughtsman, for the reason that they are thoroughly conversant with the line of work that is required of them.

The following are a few samples of the contents of apprentices' text-book:—

Examination For Promotion of Apprentices From Other Shops to the Machine Shop.

Q.—What is the weight of standard shop hammer? (Machinist's hand)?

A.—Two pounds.

Q.—At what point should hammer be held for efficient service?

A.—At the extreme end of handle.

Q.—What is the standard length of hammer handle?

A.—16 inches over all.

Q.—How many classes of drills are in general use in this shop?

A.—Two, viz.; Flat and Standard Twist drills.

Q.—At what degree is cutting end of twist drill ground?

A.—59 degrees, measuring angle from centre line of drill.

Q.—Name the speeds for drilling brass, cast iron, wrought iron and steel, different size holes, with carbon steel drills, and air hardened steel drills.

A.—As per table and as much faster as drill and material will permit:

Carbon steel drills:

Diameter	Steel or iron	Ft. per Min.	Brass	Ft. per Min.
$\frac{1}{16}$"	1920 r.p.m.	32 ft.	4160 r.p.m.	70 ft.
$\frac{1}{8}$"	960 "	"	2080 "	"
$\frac{3}{16}$"	640 "	"	1380 "	"
$\frac{1}{4}$"	480 "	"	1040 "	"
$\frac{5}{16}$"	385 "	"	830 "	"
$\frac{3}{8}$"	320 "	"	680 "	"
$\frac{1}{2}$"	240 "	"	520 "	"
$\frac{5}{8}$"	190 "	"	400 "	"
$\frac{3}{4}$"	160 "	"	340 "	"
$\frac{7}{8}$"	135 "	"	290 "	"
1"	120 "	"	260 "	"
$1\frac{1}{8}$"	105 "	"	230 "	"
$1\frac{1}{4}$"	100 "	"	200 "	"
$1\frac{3}{8}$"	85 "	"	180 "	"
$1\frac{1}{2}$"	80 "	"	170 "	"
$1\frac{5}{8}$"	75 "	"	160 "	"
$1\frac{3}{4}$"	70 "	"	150 "	"
$1\frac{7}{8}$"	65 "	"	140 "	"
2"	60 "	"	130 "	"

Air hardened steel drills:

Diameter	Steel or iron	Ft. per Min.	Brass	Ft. per Min.
$\frac{1}{16}$"	5440 r.p.m.	35 ft.	7250 r.p.m.	85 ft.
$\frac{1}{8}$"	2720 "	"	3625 "	"
$\frac{3}{16}$"	1800 "	"	2400 "	"
$\frac{1}{4}$"	1360 "	"	1710 "	"
$\frac{5}{16}$"	1090 "	"	1450 "	"
$\frac{3}{8}$"	906 "	"	1205 "	"
$\frac{1}{2}$"	680 "	"	905 "	"
$\frac{5}{8}$"	545 "	"	725 "	"
$\frac{3}{4}$"	450 "	"	600 "	"
$\frac{7}{8}$"	390 "	"	520 "	"
1"	340 "	"	450 "	"
$1\frac{1}{8}$"	300 "	"	400 "	"
$1\frac{1}{4}$"	270 "	"	360 "	"
$1\frac{3}{8}$"	245 "	"	325 "	"
$1\frac{1}{2}$"	225 "	"	380 "	"
$1\frac{5}{8}$"	210 "	"	280 "	"
$1\frac{3}{4}$"	195 "	"	260 "	"
$1\frac{7}{8}$"	180 "	"	240 "	"
2"	170 "	"	220 "	"

Q. Name the speeds for tapping steel, iron and brass, different sizes.

A.

Diameter	Iron or Mild Steel		Brass.	
$\frac{1}{4}$"	120 r.p.m.	or 8 feet	160 r.p.m.	or $10\frac{1}{2}$ feet
$\frac{3}{8}$"	90 "	9 "	128 "	$12\frac{1}{2}$ "
$\frac{1}{2}$"	72 "	9 "	104 "	$13\frac{1}{2}$ "
$\frac{5}{8}$"	66 "	11 "	88 "	$14\frac{1}{2}$ "
$\frac{3}{4}$"	60 "	12 "	80 "	$15\frac{3}{4}$ "
$\frac{7}{8}$"	54 "	$12\frac{1}{2}$ "	72 "	$16\frac{1}{2}$ "
1"	48 "	$12\frac{1}{2}$ "	64 "	$17\frac{1}{2}$ "

Q. What size should holes be drilled for tapping various sizes?

A.

Diameter of tapping holes	Diameter of screw	Number of threads per inch
$\frac{5}{32}$"	$\frac{3}{16}$"	24
$\frac{13}{64}$"	$\frac{1}{4}$"	20
$\frac{17}{64}$"	$\frac{5}{16}$"	18
$\frac{5}{16}$"	$\frac{3}{8}$"	16
$\frac{3}{8}$"	$\frac{1}{2}$"	14
$\frac{13}{32}$"	$\frac{1}{2}$"	13
$\frac{17}{32}$"	$\frac{5}{8}$"	11
$\frac{21}{32}$"	$\frac{3}{4}$"	10
$\frac{3}{4}$"	$\frac{7}{8}$"	9
$\frac{7}{8}$"	1"	8
$\frac{31}{32}$"	$1\frac{1}{8}$"	7
$1\frac{5}{32}$"	$1\frac{1}{4}$"	7
$1\frac{3}{16}$"	$1\frac{3}{8}$"	6
$1\frac{5}{16}$"	$1\frac{1}{2}$"	6

Q. What lubricant is used for drilling wrought iron or steel?

A. A mixture prepared in shop consisting of oil soap and water (boiled) or lubricant as may be furnished.

Q. What is a centre punch used for?

A. Marking centre of holes for drilling and indicating lines on other machine work.

Q. What is a round nosed chisel used for at drilling machine?

A. Drawing centres.

Q. Which side of a belt should be run next to pulley or cone?

A. Smooth or grain side.

Q. What are the general rules to be observed regarding cleanliness and care of machines?

A. All cuttings of different materials are to be kept separate. Machine to be cleaned thoroughly once per week in addition to ordinary daily cleaning, and all working parts kept properly lubricated. Marking or defacing machine in any way to be carefully avoided.

Q. Explain the reading of an ordinary standard measuring rule.

A. Apprentice will explain practically from rule.

Q. How many, and what are the names of the different classes of calipers in general use on drilling machine?

A. Three, inside, outside, compass or hermaphrodite.

APPRENTICESHIP RECORD.

Name.	Shop.	Month.	Workmanship.				Conduct.				Attendance.				Remarks.
			7	14	21	31	7	14	21	31	7	14	21	31	
Balch, H.	Erecting...	July	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	
Young, C.....	" ...	"	Good	Good	Good	Good	Good	Good	Good	Good	Good	Bad	Good	Good	Lost time account illness.

Q. What tools are necessary for laying off or measuring work at drilling machine?

A. Inside, outside and compass caliper, dividers, centre punch, rule, square and surface gauge.

Q. What is a jig?

A. A device for standardizing and duplicating parts, and is a casting or plate fitted with hardened steel bushes which form a guide for drilling, slotting, turning or planing.

Q. What are its advantages?

A. Insures perfect accuracy, abolishing the marking off system for machining.

Make a drawing of a mogul crank pin, half size; drawing to be inked in.

Make the Apprentice Think.

The object of the text book is to have the boy theoretically conversant with the work that is going to be done by him after his next promotion. For instance, a boy going from the blacksmith to machine shop has to pass his examinations before he is accepted in the machine shop, which is called "Examination for promotion of apprentices from other shops to the machine shop." As he is usually put on a drill to commence with, by studying his text book, he learns considerable about it, and also the tools he is to use in connection with it. The same practice is followed throughout the whole term of apprenticeship, and while the apprentice is working at one machine he is studying as much as possible about the machine he is to go on next. One of the great advantages of this system is that it gets the apprentice thinking, and leads him to reading up in line with his work.

The wages of apprentices are fixed by the company at rates for the 1st, 2nd, 3rd, 4th, and 5th years, but, as already indicated, the advances are given only after the apprentice has passed his examination successfully.

Advantage of Indenture System.

The indenture system has been found of great advantage both to the company and the apprentice. It has a tendency to keep the apprentice satisfied, and steady his energies along the required lines. It also prevents him from being tampered with by outside firms or corporations who desire to obtain the services of the boy as soon as he has become useful to the company who has instructed him.

At the completion of his term each apprentice receives a certificate showing that he has served as an apprentice and is a mechanic in the branch of trade that he was apprenticed to.

All Round Competency Secured.

The above system insures thorough education in all details of the trade, and while some of the work may be specialized it is not done by the apprentice until he becomes a journeyman. For instance, the apprentice comes from the boiler shop to the machine shop, from the machine shop to motion bench, to the side rod bench, to the axlebox gang, to the steam pipe gang, to the valve gang, and finally to the erecting gang, so that after an apprentice is out of his time he is a specialist in any one of these branches

This system of apprenticeship on the Grand Trunk has also been found to be the means of parents giving their sons who desire to enter the service, a better education than formerly. Before its adoption the only requirements was that the boy had to be 15 years of age. It was found that parents took their boys away from school at 12 or 13 years of age, and put them at some other work until old enough to enter the Grand Trunk shops. When the examinations were first inaugurated quite a number of the boys were turned down, and had to go back to school again before they could qualify to enter the service.

Status of Apprentices Improved.

This has not only resulted in prospective applicants getting a better education, but has elevated the moral standing of the apprentices' work, and made the system attractive to boys who have passed the high school entrance examinations, and who, although well advanced along the lines of school education, adopt the mechanic's trade in preference to other pursuits.

In conclusion, the success of the apprenticeship system is imperatively dependent upon the careful management of the examinations, and the compulsory attendance at the classes provided by the company for their education.

An apprenticeship record is also kept, as per form attached. This is filled out by the chargeman under whom the apprentice is working, is scrutinized by the foreman, and then forwarded to the master mechanic.



Fig. 1.—An Alcohol Locomotive in German Forestry Service near Darmstadt.

WHERE ALCOHOL ENGINES ARE USED.

Cheap Denatured Alcohol make the Use of Alcohol Engines Practicable.

ON January 1st the new regulations go into force in the United States whereby denatured alcohol may be manufactured and sold at greatly reduced prices. Heretofore the cost of this fuel has been so great on this continent that engines have not been devised for utilizing it, and some doubt has been cast upon the practicability of its general use. The accompanying cuts will be of general interest as showing what is already being done in other countries where alcohol as a fuel is comparatively cheap. The introduction of denatured alcohol as a fuel in the United States at the beginning of the year will give an impetus to the manufacture of engines which can use alcohol as a suitable fuel. In Canada an effort must be made to meet these advantageous conditions and profit by the experiments of others. The following description of the alcohol engines shown herewith is taken from "Cassier's Magazine":—

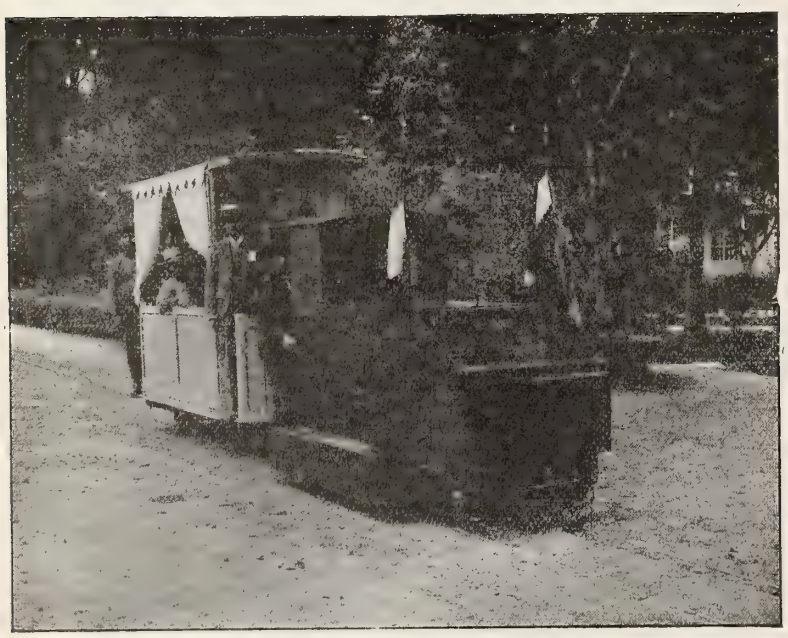


Fig. 2.—An 8 H.P. Alcohol Locomotive, built at Deutz, in Germany, for Service at Lima, Peru.

With the "free alcohol" bill shortly to become a law in the United States, the use of denaturized alcohol for power purposes is likely to receive a further stimulus. Special interest is, therefore, to be found in the several accompanying illustrations of alcohol locomotives in German and South American service.

Fig. 2, for example shows such an engine in operation at Lima, Peru, hauling a small car and having a capacity of 8 H.P., while Fig. 1 shows a similar 16-H.P. machine for use on forest railways in Germany. Fig. 3 shows still another locomotive of the same class of 6 H.P. capacity, hauling boxes on a German factory railway. These interesting types of engines are of special service for industrial work for haulage in shops and yards of iron and steel works and other manufacturing establishments, as well as for mining service.

In Germany and other Continental countries the alcohol locomotive is extensively employed with great economy, and elsewhere the increased price of gasoline is certain to produce a similar result. The cost of operation of one of these alcohol locomotives of 8 H.P. at Miesbach, Germany, at one of the mines of the Oberbayerische-Actien Gesellschaft for Kohlenberbau, is 1.25 pfennig per ton-kilometer. Nine of these locomotives are in operation at this mine, operating in shifts of ten and one-half hours' service on a grade of 1 to 333. Two 12-horse-power gasoline locomotives are in operation at the Portland-Cement-fabrik, at Amoneburg, near Biebrich-on-the-Rhine, Germany, hauling sixteen loaded cars, each having a total weight of 1,800 kilograms, on a horizontal track. The gasoline consumed was found to cost 1 pfennig per ton-kilometer.

Another 12 horse-power gasoline locomotive of this type for industrial service is in operation at the Papierfabrik Neumuhle, near Miesbach, Germany. At this plant the locomotive operates for twelve hours daily on a track about 4 kilometers long, having a rise

in grade of 24 meters. It will handle a maximum of 55,000 kilograms on a grade of 2.5 per cent.

The forest railway locomotive in operation near Darmstadt, shown in Fig. 1, operates at a speed of from 2½ to 7 miles an hour, with a draw-bar pull of 1,500 pounds at the former speed and 500 pounds at the latter speed. It is about 12 feet long, 4 feet wide and 6 feet high, and weighs, complete, ready for operation, about 12,000 pounds, developing 16 horse-power.

The alcohol locomotive shown in Fig. 2 has a draw-bar pull ranging from 350 to 775 pounds, operating at speeds from 5½ to about 3 miles an hour. It weighs 8,000 pounds.

The locomotive shown in Fig. 3 develops about 6 horse-power, and weighs about 7,000 pounds.

The largest alcohol locomotive constructed at Deutz, Germany, is rated at about 32 horse-power, with a range of speed from 2½ to 7 miles an hour. This engine weighs about 25,000 pounds when ready for service.



Fig. 3.—A 6 H.P. Alcohol Locomotive, built by the Gasmotoren Fabrik, Deutz, near Cologne, Germany, Hauling Miscellaneous Merchandise on a Factory Railway.

TARIFF CONTRASTS.

Under the above heading the "Textile World Record," one of the leading textile publications in the United States, makes some comparisons of the Canadian and American woolen industries. The article is as follows:—

Canada in the fiscal year just closed imported woolen goods valued at $16,988,253, equal to $3.09 for every one of the 5,500,000 men, women and children in the Dominion. During practically the same period the United States imported woolen goods valued at 22,646,820, or 27 cents for each one of the 85,000,000 people in this country.

This great difference in the woolen imports of the two countries is the result of the difference between their respective tariff schedules.

Canada imposes an ad valorem tax of 30 per cent. on woolens when imported from Great Britain, and 35 per cent. when imported from other countries. As Great Britain is the leading exporter of woolens, 80 per cent. of the foreign woolens bought by Canada comes from the mother country.

The United States, on the other hand, lays both specific and ad valorem duties on woolen imports, the total duty collected on these goods in the year ending 1905 averaging 91 per cent. of the appraised value. Thus the average rate of duty collected on woolens imported into the United States is three times the rate imposed by Canada on British woolen goods. The actual ratio between the Canadian and United States schedules is, however, much greater, as the Dingley rates are prohibitive on many grades of goods, and these prohibitive rates are not, of course, included in the average of 91 per cent, actually collected.

On one hand we have high protection, on the other, a low revenue tariff of practically no protective value. Other conditions are practically the same. The two countries are contiguous and nearly equal parts of one continent; both peoples are of the same race, speak the same language, and have practically the same customs, laws and form of government. The territory of each is so large as to afford highly favorable conditions for testing a tariff policy. It is difficult to imagine better conditions for this purpose. What are the results?

Under the Canadian tariff for revenue only the woolen manufacturing industry has been reduced to the vanishing point. Under the high tariff of the United States the woolen industry has developed steadily and, despite the depression in the carded wool branch, is in a prosperous and sound condition. The foreign woolen manufacturer supplies, on an average, $3.09 worth of goods to each person in Canada; and only 27 cents worth to each person in the United States. The per capita consumption of woolen goods in the two countries is practically the same, probably somewhat larger in Canada, and the deficiency in the woolen imports into the United States is supplied by the domestic mills.

The difference between the woolen imports of the two countries is $2.82 per capita. Let us see what this means for each of the two countries. If Canada's imports were reduced to her neighbor's level Canadian woolen mills would be called upon to manufacture $15,510,009 worth of goods for home consumption. Taking the United States census figures for 1900 as a basis and allowing 25 per cent. for the difference in woolen values between the two countries we have $1,213 as the value of the annual product of a woolen mill for each one of its employees. At this rate 12,800 woolen mill operatives would be required to manufacture the excess of goods now imported into Canada. It has been estimated that as modern industry is now organized, each mill worker represents seven inhabitants; consequently the actual loss to Canada by reason of the present excess of woolen imports is equal to a population of 90,000. This is equal to the combined population of Winnipeg and Halifax; is one-half greater than that of Ottawa, the capital of the Dominion, and 60 per cent. of the population of the flourishing city of Toronto.

The effects of the difference in the tariff policies of these two American countries are on but a comparatively small scale in Canada. We must turn to the United States for the most striking illustration. At the present Canadian per

capita rate the imports of woolen goods for the 85,000,000 inhabitants of the United States would amount to $262,650,000 per year, or $240,000,000 in excess of the actual imports during the fiscal year just closed. The manufacture of the goods represented by this 240,000,000, at the 1900 rate of production, gives employment to 198,000 operatives, earning $67,000,000 per year and representing a population of 1,400,000.

COAL MINING UNDER THE OCEAN.

There are in Cape Breton six collieries working under ground. The largest is the Princess or Sydney pit in Cape Breton Island. This colliery was the first in North America to mine coal from beneath the bed of the Atlantic Ocean. The seam of coal averages between 5½ and 6 feet thick, of best quality. The angle of dip or inclination seaward is 5 degrees or about 1 foot vertical in 12 horizontal. The working of the "whole coal" under the sea by the bore-and pillar system was commenced in 1877, under an overhead cover at the shore line of 690 feet of solid measures, although part of the workings driven to the rise under Sydney harbor was operated under a cover of 500 feet or less.

The present workings are distant from the shore line 5,800 feet to the dip. At this point the overhead cover is 1,140 feet in thickness of strata, with 33 to 40 feet depth of water above it. The undersea workings in the whole coal cover 1,620 acres. No sea water has yet found its way into the workings as a result of removing the pillars. A feeder of a few gallons of water per minute was encountered in some whole-coal workings driven to the rise, as also at the face of the water levels driven in the direction of the outcrop to the south, but this water evidently followed the seam of coal downward from its outcrop under the waters of the harbor. There has been no water known to come from overhead across the measures.

This immunity from overhead leaks from the ocean is probably due to the presence in the superincumbent strata of twelve beds of fire clay or underclay of a total thickness of thirty-nine feet, as well as to the numerous beds of shale. The subsidence of the overhead strata caused by the removal of a bed of coal six feet in thickness would probably under these conditions soon choke itself, so that there would be no further actual motion or settling of the strata for more than, say, 100 feet upward. Above that point the elasticity of the beds of shale and fire clay mentioned would prevent any rupture. Fire clay when brought into contact with water soon forms a soft clay resembling putty and impervious to water. Out of the submarine area there has already been taken some 5,250,000 tons of coal from the main seam, while the company has also commenced the working of another and thicker seam in the same area, from which in all likelihood they will secure as much coal as has already been taken.

APPRECIATES THE ASSOCIATION.

In a letter to the Secretary of the Canadian Manufacturers' Association, the Chairman of the New Zealand International Exhibition Commissioners, speaks of the part Canada is taking at Christchurch. Our exhibit is admittedly the most attractive of any country except New Zealand itself. Mr. Munro expresses his appreciation of the work of the Association as follows:—"Before closing this letter I must take the opportunity of placing on record my appreciation of the practical and energetic services rendered by your Association to the New Zealand International Exhibition and I intend, when the proper opportunity occurs, to make a public reference to the assistance I have received from Mr. de Schryver, Mr. Younge and yourself, for which, personally, I am very grateful indeed."

COMMERCIAL ORGANIZATIONS AND CIVIC WORK.

By Mayo Fesler,
Secretary of the Civic League of St. Louis.

In conversation recently with the director of a strong commercial organization in one of our Western cities I questioned him in regard to the civic work which his association was doing. His reply was, "We are not doing anything in that line. We confine our efforts to strictly commercial questions—the improvement of the city as a trading and manufacturing centre." Fortunately, this limitation on the field of work of the commercial organization—the most influential and powerful associations in our cities—is rapidly being removed as business men come more and more to realize that the commercial prosperity of a city cannot be separated from its civic progress.

The old idea of the scope and aim of an association composed of the merchants and manufacturers was the "booming" of the city as a place of business, a good location for manufacturing plants, and a favorable shipping point; and any movement on the part of the citizens to put restrictions on these individual business interests, in the effort to make the city a more comfortable and attractive place of residence, was looked upon as a direct menace to its commercial supremacy. This prejudice is by no means yet dispelled. Let a railroad company's request for a right-of-way into a city be opposed because it cuts through a choice residential district or fails to eliminate grade crossings, and the most powerful argument made against the opposition is this old prejudice that you are checking the commercial growth of the city. If a really serious attempt is made to abate the smoke nuisance the alarm is sounded that you will drive factories away from the city. If a city is so presumptuous as to place restrictions on industrial plants in order to protect the health of the employees, city legislators are warned to go slow. When the death roll in Chicago from grade crossing accidents grew to such an alarming extent that the public conscience demanded protection, the most obstinate and effective argument against track elevation was the danger of driving the railway terminals out of the city.

But these arguments are fast losing their potency. While it is true that the strategical position, as a point for manufacture and exchange, is the chief factor which in the first instance determines the location and size of a city, it becomes relatively a less dominating factor as the city increases in population. As a city grows its complete dependency upon trade and commerce rapidly decreases; and trade and commerce, on the other hand, become more and more dependent upon the city. Railroads, factories and business activity bring people, but people must live; they must be governed; life must be made comfortable; pleasures must be provided, and so the large city as a corporate unit with all of its wealth, prestige and multiform interests becomes eminently bigger than any individual or corporate interest. When the citizens begin to realize this they begin to subordinate these individual interests to the well-being of the whole city.

Furthermore, a commercial centre invites into its gates visitors—retail merchants and shop keepers from the surrounding country and travellers from everywhere. In order to have them tarry awhile and return again, the city must be made attractive—which means clean streets, pleasant homes, good transportation facilities, parks and boulevards and stately public buildings. In short, a city cannot, in the modern sense of the word, maintain a commercial supremacy unless it maintains at the same time a high civic life.

Montreal Manufacturers Honor Mr. C. C. Ballantyne.

Successful Banquet Tendered Past President.

NEARLY two hundred manufacturers and guests assembled in the handsome quarters of the Canada Club, Montreal, on the night of November 13th, to tender a complimentary banquet to Mr. C. C. Ballantyne in recognition of his valuable services to the Canadian Manufacturers' Association as President during the past year. The gathering was truly representative, members of the Association being present from Halifax, St. John, N.B., Quebec, Chicoutimi, Shawinigan Falls, St. Jerome, Chambly, Sherbrooke, St. Johns, Que., Windsor Mills, St. Hyacinthe, Valleyfield, Montreal, Brockville, Ottawa, Hull, Peterborough, Toronto, Merritton, Hamilton, Ingersoll and Winnipeg. ...

Mr. J. S. N. Dougall, Chairman of the Montreal Branch, presided, and seated at the guests' table were Mr. C. C. Ballantyne, Hon. R. Lemieux, Hon. Lomer Gouin, Mayor Ekers, F. D. Monk, M.P., H. B. Ames, M.P., Hon. J. D. Rolland, Robt. Munro, F. H. Mathewson, G. A. Vandry, Quebec; Lloyd Harris, Brantford; John J. McGill, A. V. Roy, R. S. White.

After the toast to "The King," letters and telegrams of regret were read from prominent people in different parts of th country.

Mr. Ballantyne's Work For the Association.

In proposing the health of "Our Guest," the Chairman spoke of the esteem and regard in which Mr. Ballantyne was held by one and all; how he had been long identified with the Canadian Manufacturers' Association and had been one of the principal promoters of the union between that body and the Montreal Manufacturers' Association in 1900; of Mr. Ballantyne's unselfish work for the Association during his Presidential term, and how as a consequence the Association had become more than ever a power for good in the commercial world.

Mr. Ballantyne was heartily cheered on rising to respond, and the orchestra struck up "For He's a Jolly Good Fellow," which was joined in with a will.

After thanking the members for the splendid banquet, which he considered in reality a recognition of the national character of the Canadian Manufacturers' Association, Mr. Ballantyne continued:—"If there is any one principle which the Association has stood for and which during my term of office I endeavored to emphasize, it is the fact that we should encourage in Canada a broad Canadian citizenship, hand in hand with hearty national sentiment. It has been one of the pleasant features of our work that we have accomplished a great deal in this direction through the annual excursions, which have now come to be looked upon as both educational and enjoyable.

A Community of Interests.

"What has been accomplished in the way of uniting the scattered provinces of our great country and establishing a community of interests between business men in every portion of it, to say nothing of the strong Imperial sentiment which radiates beyond our own shores, may never be fully put in words; but it is enough to say that at a time when Canada needed self-reliance, when her people had wearied themselves of looking to Washington for commercial favors, this Association rose above the difficulties of the hour and instilled into its own members and the Canadian people as a whole, those principles which have done so much to make us what we are to-day.

"Shortly after the publication of my annual address, which was delivered at Winnipeg, two or three leading newspapers, in as many of our large cities, took advantage of the statements which I made there to create in their own minds a great gulf between the manufacturing and farming interests of this country. Thorough protection was declared to be a 'boomerang' and the sentiment for a strong Canadian policy which exists throughout this country was called a 'bluff.'

"In my Winnipeg speech I stated facts to show the absolute necessity of protection in Canada at the present time; its value to the Canadian farmer in building up a great home market; its value to the Canadian workingman in his competition with the cheaper labor of other countries; its value to the Canadian consumer in securing lower prices on the commodities of life, because of the fact that we have these industries at our own doors; and its value to the Canadian people as a whole in developing every great resource which Providence has bestowed upon us, and providing diversified work and opportunities at home for our sons and daughters. On these four important planks my argument stands. I have nothing to retract; in fact, every day convinces me more fully of the soundness and safety of the policy of thorough protection for every Canadian industry, whether it be farming, fishing, lumbering, mining or manufacturing."

Mr. Ballantyne further denied that the Association had ever favored a tariff as high as 75 per cent., or 100 per cent. What was wanted was a careful adjustment of the tariff from a national standpoint, introducing the same sound business principles into the administration of Canadian affairs that the sensible business man would use in the development of a growing industry. "With regard to the coming revision, I have nothing to say, except that I believe that the Parliament of Canada will act wisely and well. Anyone who is familiar with the commercial development of Canada and who takes a broad outlook on the future, will know that now is the critical period when our tariff must be strengthened and our industries defended. Nothing could be more detrimental to us as a nation at the present time than a reduction in our present tariff."

After speaking of the Imperial policy of the Association, which meant a higher tariff against foreign competitors and an equalizing tariff with Great Britain, Mr. Ballantyne pointed out that any lowering of the tariff would mean that the British manufacturer would export less to Canada, and the foreign manufacturer more. In conclusion, Mr. Ballantyne made a plea for a broad Canadian citizenship.

Hon. J. D. Rolland, First Vice-President, proposed the "Dominion Parliament" in fitting terms, and expressed the hope that the coming tariff revision would tend to develop the resources of the country and give prosperous employment to all classes of people. He also urged on the Government the importance of technical education, and trusted that this would be dealt with at the next session of Parliament.

Canadianism to Replace Provincialism.

Hon. Rodolphe Lemieux, Postmaster-General, was given a splendid reception. After paying a tribute to Mr. Ballantyne, Hon. Mr. Lemieux spoke of Canada as destined to become a great factor, if not the great factor of North America, and urged the support of a broader Canadianism.

"There is only one thing to do at present," he declared, "if the goal of our ambition is to be reached, and that is to do away with all narrow sectionalism, all narrow provincialism, and become Canadians once and for all—our people should become acquainted with our great natural resources, and bring in to Canada money for investment rather than let it pass by to the Southern Republic."

Develop Hudson Bay Route.

Hon. Mr. Lemieux told how the Canadian Government was looking after the problem of transportation, and how the old trails followed years ago by trappers were now being netted by railway system. In conclusion, he said, "The Georgian Bay route is a thing of the future, the Hudson's Bay route a thing of to-morrow, and you will hear of it next session. We will during the next few weeks bring before Parliament a strong, wise and sound fiscal policy, and if you will establish cordial relations between capital and labor, we members of Parliament will promote a sound immigration policy which will people this country with good sterling citizens."

Mr. F. D. Monk, M.P., spoke of the necessity of tariff revision and declared himself to be of the same opinion as Mr. Ballantyne on this important matter. Mr. Monk further advocated the necessity of improving transportation facilities and of building up the port of Montreal and making it what it should be by natural position; the head of ocean navigation.

Lt.-Col. Burland in proposing "Provincial Legislatures" urged the importance of technical education for the welfare of the country, and also the abolition of the different extra-provincial taxes.

Technical Education Necessary.

Hon. Lomer Gouin, Premier of the Province of Quebec, replied. He declared himself strongly in favor of technical education, and said there should be no delay in equipping our youth for the industrial struggle by placing within their reach properly equipped technical schools. After outlining the steps adopted by different European countries for technical education, Mr. Gouin continued: "The commercial struggle between the nations, as pacific as it may be, is really as important as that fought on the field of battle. Indeed, it may be asserted, that in this as in all cases, victory belongs to the one which best arms itself for the fight, or in reality, to the most educated. You have asked the Government of the Province of Quebec and the Governments of all the Provinces of the Dominion to create and multiply technical schools in our country,. I am happy to tell you that the Government of Quebec is prepared to do its large share in this national work; let me in return ask you for your co-operation."

Major G. W. Stephens, M.L.A., also replied and advocated the abolition of extra-provincial taxes, and free trade throughout the length and breadth of the Dominion.

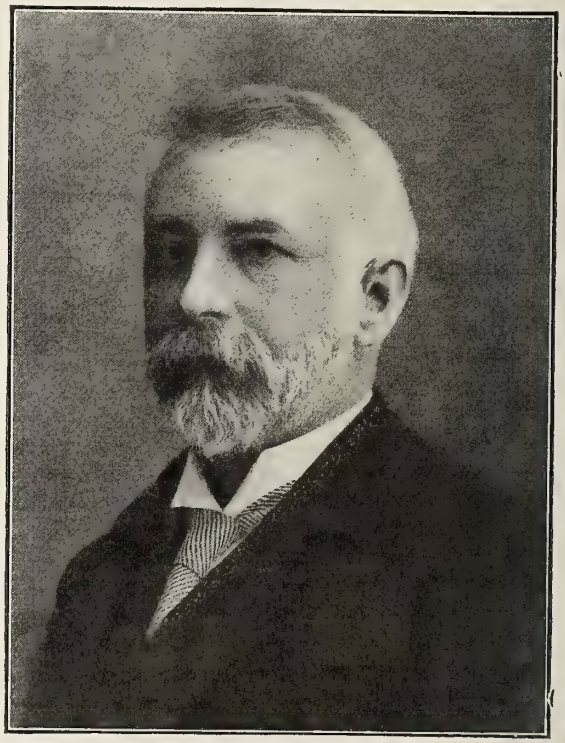
Mr. Lloyd Harris, of Brantford, Ontario Vice-President, in a humorous speech proposed "Montreal and its Commerce" which was replied to by Mayor Ekers, Mr. F. H. Mathewson, President of the Board of Trade, Mr. A. V. Roy, of La Chambre de Commerce, and Mr. R. S. White, Collector of Customs.

The final toast of the evening was "The Chairman," proposed by Mr. Ballantyne.

HON. W. S. FIELDING, FINANCE MINISTER.

Interest in the present session of the Federal Parliament will centre in the Finance Minister, Mr. W. S. Fielding. The tariff session, as it has come to be called, belongs to him. On November 29th he introduced his eleventh budget speech, the importance of which lay in the recommendations for tariff revision which it contained.

Mr. Fielding is a strong figure in the Canadian Parliament. He is the only member of Sir Wilfrid Laurier's original cabinet who remains in the Lower House. Nova Scotia has sent many strong men to Ottawa, but none who has left a greater mark on political affairs than he. He is an example of the class in which Canada is happily strong, that of self-made men. Commencing as an inky-fingered boy in a newspaper office he rose through the various stages of



Hon. W. S. Fielding,
Financial Minister for Canada.

journalism till he edited a paper of his own. It was in this position that he gave the attention to economic questions which has influenced his work since as Finance Minister.

In Parliament he has been a hard working, aggressive member. His official position has called for continuous attention; the care of the finances of Canada is no longer a sinecure. His continuous occupation of the office for ten years is without an equal in Canadian politics.

The business heretofore carried on under the name of the Hastings Hat and Cap Manufacturing Co., Limited of London, Ont., will in future be conducted under the name of Forsythe, Morrison & Co., Limited. No other change will be made, except the change of name.

RAILWAY RATE DISCRIMINATION IN FAVOR OF THE UNITED STATES.

THE vexed question of the discriminatory freight rates in favor of United States and against Canadian shippers was again before the Railway Commission at a hearing in Montreal on November 8th. At this hearing the railways submitted to the Commission an outline of their plan to overcome the discrimination complained of.

Uniform Classification.

In the first place they pointed out that uniformity of classification would be essential to any satisfactory adjustment. At the present time traffic from United States points into Canada is subject to the Official United States Classification, containing nominally only six classes into which the various articles are grouped for transportation, whereas traffic originating at Canadian points is subject to the Canadian Classification, which comprises ten classes. The impossibility of reconciling the differences between the two books was referred to, and it was suggested that the Canadian Classification should be adopted as the one most suitable to govern traffic, both from the United States and Canada and within the borders of this country.

Revised Rates.

The adoption of the Canadian Classification would make necessary a complete readjustment of the scale of rates from United States points to Canada, because the present rate scales have only six classes whereas ten classes will be required. In this connection the railways said they could not accept the rates in use in the United States for their Canadian traffic as those were based upon a traffic of much denser volume than was available in Canada, and to adopt such rates as the standard would require a readjustment of local and through rates throughout the eastern part of the country which would spell financial difficulty for the Canadian roads. Instead of this, after a number of conferences with the interested United States railways, they proposed that a uniform basis of rates should be adopted to apply on business between United States and Canadian points, but not to interfere with the rates applicable on through traffic from United States points passing through Canada destined to other United States points. This plan, it was claimed, would require reductions in rates commencing at the Detroit frontier and scaling east by groups as the mileage decreased, and would do away with the complaint, that rates on traffic from United States to Canadian points are lower than from intermediate Canadian stations to the same points of destination.

Raw Materials.

The re-adjustment of freight rates, it was explained, was not intended in any way to affect raw materials imported from the States by manufacturers. These are usually carried under what are termed "special commodity tariffs," and should there be any traffic of volume now moving under the class tariffs it was intimated that this could be taken care of by the issue of commodity tariffs continuing the present rates so as to prevent any advances.

General Effect.

Under the plan proposed, generally speaking, there would be some advances in rates on what is termed "class traffic" from United States points to Eastern Canada. Machinery and all raw materials would be carried at the present rates. On the other hand the rates on traffic handled under both class and commodity tariffs commencing at the Canadian frontier would be reduced by groups eastward. The view was expressed by the railway representatives that the proposed increase in rates from United States points would to a large extent be simply in "paper" rates, that is, rates under which no traffic moves, because the great bulk of the traffic from United States to Canada is handled under commodity and not class tariffs.

The railways claimed that the adjustment proposed was the result of very extensive work by some of the most able traffic experts on the continent, and were believed by them to be fair. The hope was expressed that the plan would be carefully considered by the Railway Commission and the interested shippers, and if found satisfactory as a basis upon which to commence the revision of the rates they would proceed with the compilation of the tariffs from Windsor, Chatham, London, and other points on the revised basis.

Further Revision Suggested.

It was suggested at the hearing that while revising the rates to prevent discrimination in favor of United States shippers it might be desirable to attempt to reconcile the difficulties existing in east and west-bound rates about which complaint has already been made to the Commission. To this end it was proposed that after the interested parties had an opportunity to carefully study the effect of the plan outlined that a further conference would be held and views exchanged.

The Canadian Manufacturers' Association was represented at the hearing, and its Railway and Transportation Committee is giving special consideration to the matter. The interested Boards of Trade throughout the Province will, no doubt, also be given an opportunity to understand what is proposed before the Railway Commission will definitely approve of any readjustment in the rate scales.

REDUCED FREIGHT RATES TO KOOTENAY COUNTRY.

In consequence of an order recently issued by the Railway Commission there is to be a change in freight rates from points in Ontario, Quebec and the Maritime Provinces to the Kootenay Country.

Some years ago before the construction of the Columbia and Western Railway beyond Robson, and before steamship communication in the Kootenay Lakes had reached present proportions most of the towns of any size in the Kootenay were given what was known as the Nelson Common Rate, that is practically one group rate applied to all points, with a few minor exceptions. After the construction of the Crow's Nest Pass Railway, which gave a more direct communication from the east to Kootenay points, the Canadian Pacific Railway rearranged its freight rates and restricted the application of the Nelson group rate to the more important centres, such, for instance, as Nelson, Rossland, Trail, Robson and Smelter. To other points in the Kootenay rates from the East were made up by adding certain "arbitrary" figures to the Nelson rates. These arbitrary figures in many cases approximated the sum of the rate to Nelson plus the local freight rate beyond. This increase in rates was objected to by some of the Kootenay towns and a complaint was made by the Kaslo Board of Trade to the Rail-

way Commission. The hearing of this complaint made it necessary for the Commission to investigate the subject generally and the result has been the issue of an order which requires a re-adjustment of Kootenay rates. Material reductions are to be made in the arbitrary figures which are charged over the Nelson rates. For example, Kaslo rates were made by adding an arbitrary of 20 cents per 100 pounds first-class to the rate from Eastern points to Nelson. By the order of the Commission this arbitrary is reduced to 12 cents. Sandon now pays an arbitrary of 42 cents per 100 pounds over the first-class rate to Nelson, but this will be reduced to 30 cents per 100 pounds. Greenwood on the Columbia and Western Railway is shown in the tariffs as taking an arbitrary of 60 cents first-class over the Nelson rate; in the readjustment this will be reduced to 38 cents per 100 pounds. Grand Forks now 45 cents over the Nelson rate will be reduced to 32 cents. Rates on the lower classes and to other stations in the Kootenay are similarly affected.

The Canadian Pacific Railway is instructed to issue the necessary tariffs to give effect to these changes not later than the first of January.

COMPULSORY LABOR INSURANCE ABROAD.

The German "Imperial Labor Gazette (*"Reichsarbeitablatt"*), devotes a dozen pages to a comprehensive review of what has been done in the domain of compulsory insurance against unemployment. In the van of these social experiments are St. Gall, Basle, and Zurich, so that it is to Switzerland that one has to look for guidance in this direction.

The systems of compulsory insurance in these three places are by no means identical. In Basle the movement originated with the Government, which authorized the Minister of the Interior to present a report on the founding of a compulsory insurance institution. With the assistance of Professor George Adler, a scheme was propounded and, with modifications, brought into operation. The assured were divided into two classes—factory workers and those engaged in the building trades. The contributions were graded according to the wages earned. For every factory worker the employer contributed one penny and for builders' laborers two pence weekly. Support was not allowed in cases of—

(*a*) Unemployment through strikes and lockouts.
(*b*) Voluntary giving up of work.
(*c*) Certain conduct of the assured.
(*d*) Sickness and accident.
(*e*) If 26 week' contributions had not been paid.
(*f*) If the assured refused work without sufficient grounds.

The key-claim to support was that the assured must be innocently (*unverschuldete*) unemployed, but the law did not define what was to be understood by that term. Provision was made that the insurance was not to be in any way used as an instrument by the employers against the operatives in cases of trade disputes.

Relating to the older method of optional insurance there have been two experiments in Italy—at Bologna and Venice. The insured must have a book for his contributions, and as proof of his unemployment he must have a certificate from the employer or the witness of four workmen that his unemployment is *unverschuldigt*, or through no fault of his own.

These experiments represent a distinct stage in the process of robbing unemployment of many of its worst consequences.

New Source of Power.

A scheme has been devised whereby crude oil is enabled to furnish the source of power for gas engines. The mechanism and principle involve a horizontal rotating drum with interior spiral ribs, enclosed in an outer casing. The crude oil enters the drum at one end and by rotation and the spiral ribs, is carried slowly and uniformly through it. While the oil is passing through the drum it is exposed to sufficient heat to generate gas, which is drawn off and utilized by the engine in proportion to the amount generated, and the residue is discharged. The heat is supplied by the exhaust of the engine, which passes between the drum and the outer shell and keeps the drum at a certain temperature, just high enough to get all the gas out of the oil. The rotating drum stirs the oil, turns it over and over, carries it in a thin sheet upon the sides of the drum and exposes it to the heat. This is the best method of generating gas from crude oil. By it the gas is generated without an excessive amount of heat, the residue is discharged, as soon as the gas is extracted, thereby obviating the necessity of the continuous cleaning heretofore necessary, while it insures a regular uniform supply of gas to the engine. The difference in cost between gasoline and crude oil is considerable. It is stated that one gallon of crude oil will develop nearly as much power as a corresponding amount of gasoline.

Canada and Jamaica.

The need of closer trade relations between the two British colonies of Canada and Jamaica is the message which Mr. Frederick E. Jerome, of Kingston, who is now in this city, feels that he has to bring from the West Indian island.

"There is no doubt about it," he said to a Star reporter yesterday, "the business relations of the two countries are not what they should be, nor can there be much question as to its beneficial results to both if such relations could be strengthened. Of course, it is a very much more vital question for us than for you, because the bigger country can always more easily dispense with such intimacy. Jamaica can supply a great part of Canada's needs, just as Canada can supply a great part of Jamaica's, and they ought to get closer together."

"How do you account for the fact that this inter-colonial trade has failed to grow to the proportions it should have reached?"

"Just apathy—apathy on the part of Jamaicans and Canadians alike. Jamaica, however, has done more than Canada, for some three years ago the Legislative Council set aside quite a sum of money for the purpose of securing better steamship communications with the Maritime Provinces of Canada. The Canadian Government, however, failed to show any desire to increase the existing subsidies. In fact, almost all the development that has taken place in the trade between the two countries for several years past is due to private enterprise."

On its being pointed out to Mr. Jerome that slackness of the trade might also be due to the fact that Jamaicans did not advertise in this country as much as they might, he said:—

"That also is a great cause of the lack of intimacy between the two countries. Jamaicans have shown in this matter an apathy which is certainly culpable, as in the case of their poor displays at the expositions of Toronto and Halifax. It is high time Jamaicans learned the value of such shows in making their country and its products known."—Montreal Star.

ADVERTISING CANADIAN INDUSTRIES

By J. ANGUS MacDONALD

Author "Successful Advertising—How to Accomplish It."

The Booklet as a Business Buyer.

THE booklet is a most popular form of advertising. It may be termed a miniature catalogue, although the average booklet does not run to items and prices as does the catalogue. Being considerably smaller than the catalogue, it is much less expensive. The catalogue, as a rule, is issued twice a year—along in March for the spring and summer season, then along in August for fall and winter trade. The booklet is frequently issued as often as once a month.

The advertiser can tell a good story in a booklet. In fact, a pretty fair idea of the average business can be compressed within booklet covers. Of course, everything depends upon the treatment of the matter—the manner in which the subject is written, illustrated and printed. And each point should surely be skilfully handled.

Booklets can be used to advertise all branches of business. Judging by their numbers, they seem to be called into requisition to give publicity to every imaginable line of business endeavor. The vast volume of booklets now going through the mails are aimed to advertise shoes, hats, clothing, wines, medicines, foods, dry goods, colleges, railroads, hotels, resorts, toys, games, novelties, etc.

The greater number of booklets are illustrated with photo half-tones, pen-and-ink sketches, "color work," wood engravings and cheap "line cuts." Many an artist, who a few years ago, would scorn "commercial work," now makes a handsome income by producing pictures for booklets, catalogues, and advertising generally.

The great point about a booklet is to skilfully interest the reader in the subject discussed—if possible to lead up to that pleasant point where an order is given. It logically follows that the writer of a booklet should be a pretty fair salesman when orally talking with a customer. At least, he should be able to analyze the strongest selling points of the subject, then present this analysis in a pleasing, cogent style.

A good point to remember in writing a booklet is to have short sentences. Likewise short paragraphs. They are more inviting to the reader's eye. They are more easily read. They are more likely to be remembered. Many a booklet, otherwise all right, was spoiled by long-drawn-out sentences and paragraphs. They tire the reader before he begins to read them. And what is the good of your booklet unless it is read?

Here is an illustration of a sentence and paragraph altogether too long. It is clipped from a Boston booklet. (In Boston, at least, writers are supposed to be skilled word manipulators, although the following instance does not show it:—

THE EUREKA STRIKING BAG PLATFORM.

The Eureka takes but little space, can be put on the casing of a door or on the wall, is very rigid and strong, and can be put up in ten minutes; is made of birch, ash or quartered oak, and highly polished; brace rods of steel tubing; very strong and durable; is fitted with the best nickel plated bell swivel and our best Napa green kid treble seamed bag with pure gum guaranteed bladder, bag and bladder complete not weighing over eight ounces.

The following is suggested as an improvement:—

THE EUREKA STRIKING BAG PLATFORM.

The Eureka takes up but little space.

It can be adjusted on the casing of a door or to the wall—in ten minutes.

It is made of birch, ash or quartered oak, is highly polished, and has brace-rods of steel tubing—therefore is rigid, strong and durable.

The Eureka is a handsome affair, for it is fitted with the best nickel plated bell swivel and our best Napa green kid treble-seamed bag (with pure gum guaranteed bladder). Both bag and bladder do not weigh over eight ounces.

I think that you, Mr. Gentle Reader, will agree with me that the latter talk on the "Eureka" is clearer and not so conducive to "that tired feeling" as the former. This specimen of poor word construction was clipped from a 48-page illustrated booklet that must have cost at least a thousand dollars to issue. The illustrations are all right, the printing fair, but the wording is subject to severe criticism. The booklet looks as though its compilation had been left to the tender mercies of the janitor. Indeed, many a janitor could write better stuff.

If this firm had given the copy to some good advertising writer to be edited, at a cost of fifty or a hundred dollars, the value of the booklet could have been enhanced fifty per cent. No! The advertising man's modest fee was "saved"; a cheap clerk was probably asked to do some extra work a few nights in a soul-racking struggle with impossible sentences. The firm with its cheeseparing policy thought it did a fine stroke of business. The booklet went out by the thousands, and—well, orders suffered!

Proper Wording Necessary.

Many business concerns are like this Boston house, in the respect that they have no conception or appreciation of the value of a skilful presentation of arguments on paper. I would much rather see five hundred good booklets go out to advertise my business than five thousand, or even fifty thousand mediocre booklets. A good booklet is an advertisement for a business; a poor one is a misadvertisement

The standard of intelligence is higher to-day than ever before. The appreciation of good advertising literature and criticism of the other sort is keener to-day than ever before. The business house sending out booklets not up to a pretty high standard fools itself—not the public.

When a manufacturer, wholesaler or retailer issues a booklet and specifies certain lines, with items and prices, he should be careful in so enumerating only goods that will be kept in stock for a reasonable period after issuance. Sometimes such a booklet is kept a few months or weeks to be consulted when ordering goods; therefore, the firm during this period should be in a position to promptly "make good" on any assertion made in its pages.

Often the volume of a business does not warrant the expense of a catalogue; therefore a booklet is issued. This booklet is given out as is a catalogue, viz., sent direct to certain names, or mailed in response to ads. which conclude with the extremely frequent advertising injunction: "Send for booklet." Have you ever noticed the great number of ads. which wind up with "Send for booklet"? Look through your favorite popular magazine when you finish this article and note the many, many advertisements with such a conclusion. Pretty strong evidence there regarding the wide popularity of booklets!

Selection of Materials.

As a matter of economy in buying paper for a booklet it is well to remember that when the quantity is brought for so many "forms," and for such-and-such an edition, the paper can be bought at a better price. A "form" is a number of pages that make up a section of set-up matter in a chase. Eight pages is a "form." When paper is bought for an eight, or sixteen, or twenty-four-page booklet, it is bought for one, two or three "forms." The paper is originally cut to fit forms, so there is not the waste there would be in a seven-page, fifteen-page, or twenty-one-page booklet. All printers understand this; therefore, about all booklets are made up of so many exact "forms."

In compiling a booklet I think the best way is to go ahead and get up your matter. With the copy and cuts before him, the printer can estimate more intelligently. When he turns in his estimate, request also a "dummy." With a "dummy" before you a clearer idea of where cuts, type effects, etc., will appear can be had. Should you desire a "cover design," the artist is also aided by the "dummy."

When the printing job is given out, ask the printer to get up a page for "style." See that you get something good in this set-up. If the first effort does not come out all right try a second, or even a third. The best page of set-up can be a "style" and standard for the other pages, and in this way a uniform distinctive typographical arrangement is given the entire booklet.

But more important than type, paper or cuts is what is said in the booklet. Therefore the necessity, first and foremost, of a good writer; then, if you please, of a good artist and printer. The three should be able to produce that unquestioned advertising aid to business, a good booklet.

AN INDUSTRIAL PENSION SCHEME AT YORK.

An interesting pension scheme for industrial employees was inaugurated recently by Messrs. Rowntree & Co., Limited, of York, Eng., by which some three thousand odd employees of the firm will be affected. The scheme has several novel features, including a guarantee of the benefits by the company, which is made possible by an absolute gift of £10,000 by Mr. Joseph Rowntree, and a contribution of a further similar lump sum by the directors, to form a nucleus of the fund.

The scheme provides that all male employees of twenty years and upwards who have been employed at the York works for six months shall be eligible for participation in the fund. After the initiation of the scheme, which is to come into operation on November 1st, the retiring age for all employees shall be sixty-five. Participation is not compulsory, but all male employees will be retired at sixty-five; any one retiring after sixty may claim a pension of such amount as the actuarial value will allow. Subscribers may elect to determine the amount for which they will subscribe, but it must be for not less than 15s. a week at sixty-five, nor must the subscription be less than 2½ per cent. of the subscriber's wages. The tables of contributions have been prepared by Mr. George King, actuary, of London. To all contributions made by employees Messrs. Rowntree, Limited, will contribute amounts which will more than treble the pension derivable from the subscribers' contributions alone. Provision is made for the return of members' contributions with 2½ per cent. compound interest in the event of death before sixty-five, and, in the event of the death after pension but before the subscriber has received in total pension a sum equal to his own subscriptions plus 2½ per cent. compound interest, to his personal representatives will be paid the difference between the total pension received and the amount of his own subscriptions plus 2½ per cent. compound interest to the date of his last contribution. Provision is also made to meet the case of men leaving the company's service or of incapacity for work before arriving at pension age, or for the exchange of his pension for an adjusted pension of less amount, but of the same actuarial value payable to himself during his life, and, after his death, to his widow during her life. The pensions are to be forfeited on assignment or bankruptcy, while in the event of the lunacy of a subscriber or of his entering an institution for inebriates, provision is made for the application of the pension for his maintenance or that of his wife and children.

Company Guarantees Fund.

The management of the Pension Fund will be in the hands of seven trustees, four of whom will be appointed by the company, one elected by the office staff and travellers, and two by the rest of the employees. The chairman of the trustees must be one of the company's representatives, and he will have a casting vote. In considering the constitution of the board of trustees, it is pointed out that the company is accepting the whole responsibility of guaranteeing the solvency of the fund. Should the trustees make an unwise investment of their money, the company, and not the subscribers, will have to bear the consequences. It is for this reason that the company feel they are fully justified in asking for a majority upon the board of trustees.

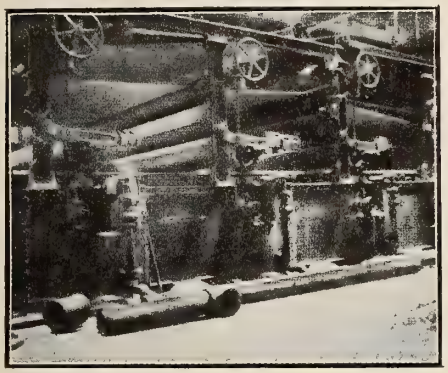
Provision has been made for the termination of the fund in certain eventualities, and on the dissolution of the fund it is to be distributed by the actuary among the subscribers. "The contributions of the company," proceeds the scheme, "are entirely voluntary, and the company may at any time give six months' notice in writing that they propose either to reduce, suspend, or stop their contributions. In such case it will be for the members to determine whether they will continue the pension scheme, with modified benefits, or whether they will terminate the scheme."

Special provision is made to meet the case of those who have been in the service of the company for many years, and who are now approaching sixty-five years of age. If these were to join the scheme upon the ordinary terms they would only be able to obtain very small pensions, and to meet these cases the directors propose to put back the service of the men affected one-half, enabling a man now fifty-five to join as if he were forty-five, and in other cases to increase contribution to the pension to a weekly sum equal to 6d. for each completed year of uninterrupted service. In the case of a subscriber now married whose wage is not more than 26s. weekly, the company will till he is forty-five years old, or his wages are more than 26s. per week, pay the excess of his premium above 8d. per week.

MAKING PAPER FROM PEAT.

A new Process for Converting Peat into Cardboard.

PAPER from peat may yet prove the solution of two questions which are now agitating the Canadian public. One is how to make some commercial use of the vast peat bogs which are a blight on the landscape in numerous sections; the other is how to preserve our forests from the inroads of the paper-makers. The combination of problems has to some extent solved both of them. The plant which has been running for several months with unbounded success in the United States, and the company



A Portion of the Paper Machine.
Here the pulp is converted into paper.

which has just been organized here for a similar purpose, are the pioneers on this continent in the manufacture of peat paper.

The process of manufacture is highly economical. It seemed almost incredible that the well-finished card which was shown to the writer had been changed from peat to its present form in two hours. Yet this is what is being done regularly in the older plant, and what will be done in Canada as soon as the machinery is placed.

The great problem about turning peat into fuel of commercial value is the enormous quantity of water which it contains and the difficulty of pressing it out. This quality is of positive value in its role as a raw material for paper manufacture. There cannot be too much water to it. No matter how wet it be, there must still be a large amount of water added.

The Process of Manufacture.

In the changing of peat into paper the peat is first put in the "hesser." The operation of the hesser is novel and interesting. The large, round bed of the machine, on which the peat is thrown, revolves slowly. At regular intervals, around the bed and above it, are ten huge arms with claw-like ends, which, revolving up and down and through the peat, with water added, break up the tender roots and moss, mixing all thoroughly, so that the peat comes out soft and mushy.

The product is then put in the "breaker," where a further trituration takes place. Each operation calls for more water, and by the time the peat has been subjected to the "breaking" it is a thin, black pulp. This liquid, for such it has now become, is drawn off into tanks, where it is subjected to further refinement and is screened so that no stones or grit can get through. The resultant product is a clean, black pulp.

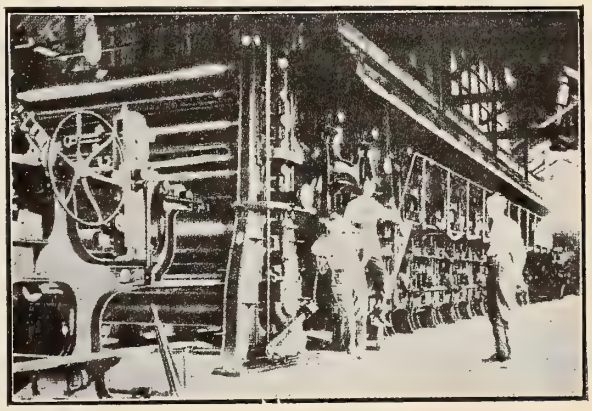
Peat Pulp Becomes Paper.

It is now ready for the paper or "wet" machine, which converts the pulp into paper. The operation of this machine is not unlike the combing of wool. A cylinder covered with a fine wire cloth revolves through the liquid pulp. A thin layer of fibre adheres to the wire cloth, while the water runs through the meshes. This layer of fibre is taken off the cylinder on to a layer of felt, which runs in the form of a belt, being pressed down on the cylinder by means of a roller. By this belt it is carried through a number of rollers, which compress it by degrees into a thin, endless sheet of cardboard.

A drying machine consists of a number of huge hot rolls, around which the paper goes. It just takes twenty minutes to dry it with this process. The product is then a dry, firm paper. Finally, it passes between heavy pressure rolls, which give it the required finish. It only has to be cut into the desired sized sheets to complete the work. The whole operation from peat to paper takes just two hours.

The Field for Manufacture.

It is probably too early to say to what extent peat paper will displace other kinds. The immense demand for paper at the present time, for all purposes, makes the perfection of a new process especially acceptable. The only field which it will enter for some time will be that of cardboard. For this it has advantages in the way of finer finish, greater durability, freedom from odor and impregnability to moisture. There is a wide sphere of usefulness open to the Canadian manufacturers.



The Huge "Drier" Machine.
Twenty minutes after the endless sheet enters the machine at one end wet, it comes out at the other end dry and firm.

The source of supply and place of manufacture of the Canadian company, the Standard Paper Company, is on the line of the C.N.R., north of Toronto. Extensive peat bogs exist there.

The Dominion Steamship Subsidies.

The Dominion Government paid during the last fiscal year steamship subsidies to the amount of $1,227,560, as compared with $1,027,074 in 1905. Of this $400,640 was expended upon the carriage of the mails and the encouragement of trade between Canada and Great Britain. The mail subsidy paid to the Allan Co., comprised $282,390 of this amount, which was $43,116 more than this service received in 1905. In addition to this largest item in the subsidy amounts, the Dominion paid also $186,970 toward the Australian service, $133,833 toward the South African service, $122,222 toward the maintenance of a direct steamship to France, $73,000 toward the Canadian Pacific service to China and Japan, $79,500 for the two services from Canada to the British West Indies and British Guiana, and $54,905 for the direct service recently inaugurated between Canada and Mexico.

FOREIGN TRADE NOTES

Canada's Trade with Australia.

THE Canadian Trade and Commerce Reports gives the following account of Australian conditions for trade:—

"In most departments of the import trade business continues to be exceptionally good, though in some instances the uncertainty as to the proposed alterations in the customs tariff has checked the placing of some large orders for Canadian as well as other oversea goods. The outlook for pastoral, agricultural, dairying and mining industries is most encouraging, as in nearly every instance the output is being increased by the stimulating influence of high prices. The cereal crops have so far had fair spring weather, and, while the next two months are most uncertain, it is anticipated that Australia will produce more than 60,000,000 bushels of wheat this season. Imports and exports are expanding, and with a settled tariff, greater increases are with confidence expected."

"Large shipments of Canadian chairs, sundry lines of furniture and iron piping are now landing in Melbourne. Canadian pipe makers have been unable to meet United States competition in some exceedingly large orders placed recently by local importers. Canadian axes are being slowly introduced after a hard fight with the old brands, which controlled the market for many years. Quite a large number of indents have recently been taken in South Australia for varied lines of 'made in Canada' goods. An increasing business is being done in glace kid and other leathers shipped by Canadian tanners, who are giving special care to the export business. British Columbia canners are unable to execute Australian orders for salmon. Local supplies are short, prices are advancing, and there is little chance of any salmon being carried over from this season."

Opportunity for Canadian Trade.

Concluding a lucid statement of the trade which is being done between Canada and New Zealand, Mr. J. S. Larke, says:—

"It will be seen that there is room for a very considerable expansion of Canadian trade, particularly in the lines of boots and shoes, furniture and paper. The figures in the statement respecting paper do not convey all the facts. The total importation of printing paper last year was £133,436, nearly the whole of it, as will be seen, coming in without being subject to the preferential tariff. The Act exempted for three years contracts which had been entered into by newspapers for that period from the excess duties. These contracts will shortly expire and Canadian paper-makers ought to very largely increase the trade which is now being done. In wrapping paper the total imports were £9,746, nearly one-half of which paid the extra duty of 2s. 6d. per cwt. Canada has scarcely touched this line."

Is Canadian Timber Suitable?

The forests of Maine at present supply practically all the birch wood which is used in making reels for the cotton industry of England. Why is not the birch of Canada available for this purpose? The articles made are small, but such a large quantity of them is used that the supply of wood from the old source is beginning to fail. For instance over two million feet of timber is shipped annually to Scotland to supply the demands of the thread manufacturers alone. It would be well to investigate the trade and find out if Canada could not supply this wood.

To Develop Foreign Trade.

Japanese trade is to be promoted by means of an "Association for the Development of Foreign Trade." The Association consists of a large number of business men, with several leading citizens of Tokio at their head. Members will travel through Europe and America and by means of cinematograph exhibitions, present the conditions of Japanese industries and the possibilities for trade. Every effort will be made to establish business connections between Japanese and foreign merchants. One idea is to enter into what is known as sample contracts in order that a relationship may be opened up. The Association has invited all Japanese firms and companies to enter into the scheme for advertising the country.

Mr. Kittson on South African Trade.

Recently Mr. C. M. Kittson, the Canadian Commercial Agent in South Africa, sent a report home on trade conditions in that colony, and advising Canadian exporters to be careful to whom they granted credit. The report is discussed as follows in the Cape "Argus:"—

"In regard to the unfavorable report on the state of South African trade made to his Government by the Canadian Agent, commercial opinion on the Rand seems to be divided. Some are indignant at the wholesale condemnation of the position of South African trade and resent the fact that no distinction is made between the old-established houses and those that have sprung up in such numbers since the war. The former, it is pointed out, generally replenish their stocks through their European buying agents, and as a consequence the representatives of oversea manufacturers seldom secure an order from them. The smaller traders, however, bound to no London buyers, prove the traveller's best customers, and the representative in order to make some show for his naturally heavy expense and remuneration, is accused of granting credit with uncommercial liberality. Frequent disaster, of course, results and merchants complain that the high percentage of failures and bad debts among this class of trader—variously described as 'small' and 'of mushroom growth'—is frequently and quite erroneously quoted as representative of South African trade as a whole.

"It is further pointed out that the country's position is intrinsically sound. If the import figures are decreasing production for South African consumption and for export is increasing. In trade, the 'weeding out process' has gone on steadily and must continue until equilibrium is restored. More firms may go, but unless they are further tried by injury to their credit arising from indiscriminate and unreasoning doubt the majority cannot fail to remain. On the other hand, there are, of course, not a few pessimists whose views are in complete agreement with the worst that has been written and stated of the outlook. Numerically, at least, this class is outweighted by those who counsel patience and courage. The truth, as usual, probably lies somewhere between the two extreme views. No doubt the alarmist reports are both exaggerated and unfair; no doubt also the optimists will have need of all their courage and patience before they realize their hopes. Meanwhile sweeping generalizations are rightly condemned and ought to be, in every case, discounted. In the opinion of some of the best judges the worst is now over.

AMONG THE INDUSTRIES

The Vulcan Iron Works, of New Westminster, B. C., are erecting a large addition to their plant.

Calgary has been chosen as the headquarters of the Western Canada Coal & Cement Company.

Extensive improvements and additions are being made to the shops of Cowan & Company, Galt, Ont.

The Sherwin-Williams Company have begun operations on a $40,000 distributing warehouse in Winnipeg.

A flour mill with a capacity of 500 barrels a day will be erected in Vancouver by the Hall Elevator and Grain Co.

The Cape Breton Foundry Company will commence operations at once for the erection of a plant at Sydney, N. S.

A number of capitalists are negotiating with the Lachine town council for land, etc., upon which to erect a million dollar cotton mill.

The United Zinc Company, of Boston, will shortly open a branch in Toronto. The Canadian factory will commence with a staff of about twenty.

The Montreal Steel Works are increasing their capital from $1,500,000 to $2,000,000. The additional capital will be devoted to increasing the plant.

Another extension to the warehouse of the Cockshutt Plow Company at Winnipeg has been decided upon. A three-storey building will be added.

Incorporation has been granted the Sanderson Manufacturing Co., Sydney, N. S., with a capital of $45,000. They will manufacture roofing material, tar paper, etc.

The Lehigh Portland Cement Company have been incorporated with a capital of $1,000,000, as manufacturers and dealers in cement, lime, etc. The head office will be at Thurlow, Ont.

The Atwell Fleming Printing Co., Toronto, are erecting a four-storey building of modern construction. It will be completed early in 1907, and will be equipped throughout with new machinery.

The Northern Ontario Consolidated Copper Company will erect a smelter at Dead Lake, Ont. It will be the first copper smelter in Canada, and will handle the ores which formerly went to Illinois.

The Canada Tin Plate & Sheet Steel Co., Ltd., of Morrisburg, announce that they will be manufacturing tin, terne, and Canada plate, black and galvanised sheets, planished black plate, etc., by January 1st.

The extensions to the plant of the American Locomotive and Machine Company at Longue Pointe, Que., will cost $175,000. When these enlargements are completed the output of the shops will be five locomotives per year.

The Ideal Fence Company, Limited, have completed the erection of a factory building in Winnipeg. The machinery will be installed at once so that operations can commence. The company will manufacture woven wire fences and gates.

The Kerr Engine Company, Limited, Walkerville, Ontario, have issued a handsomely designed catalogue, illustrating their valves and hydrants. It contains over sixty pages of reading matter. Cuts and full information, with price lists, are contained in it.

Graham Fraser, formerly of the Nova Scotia Steel Company and of the Dominion Iron and Steel Company, has organized a company to establish a car wheel factory at Longue Pointe. The intention is to erect a plant with a large output, which will employ a large body of men.

The Ward factory building in Leamington has been purchased by the Detroit Trolley Wheel and Electric Equipment Co. Brass goods, tools, etc., will be manufactured. The company also state that they will manufacture automobiles when they get their factory in running order.

An independent telephone manufacturing company will establish a plant in Toronto soon. The Century Telephone Construction Company is its name and it will be located at 53-59 Adelaide Street West. The company will manufacture everything used in independent telephone systems.

TRADE ENQUIRIES

NOTE—For further information regarding any enquiry mentioned under this heading or the name of enquirers, apply by number to the Secretary, of Toronto.

109 **Agencies.**—Inquiry is made by a company in **Paris, France,** organized for the promotion of a trade between France and Canada, for the names of Canadian shippers of pulp (mechanical and sulphite), canned lobster and salmon, evaporated apples, cod liver oil, mica, hardwood, agricultural implements, hams and cured meat, tanning extracts, linseed, corundum, paper (news), and maple sugar.

110 A native of **Cork, Ireland,** possessing good connections as a commercial traveller throughout the United Kingdom, is open to entertain a proposition to represent not more than six good Canadian houses on a salary and commission basis. London and Cork references are supplied and guarantee bond would be furnished.

111 **Apples.**—A **Yorkshire, England,** firm of produce merchants make enquiry for Canadian apple shippers, capacity 200 barrels per week.

112 **Apples.**—Inquiry is made by a large produce firm with branches throughout **north England** for Canadian shippers of apples to meet a demand of 2,000 barrels per week, direct, via Liverpool.

113 **Baby Carriages.**—A **Liverpool, England,** firm with extensive connection wishes to correspond with Canadian manufacturers of baby carriages.

114 **Bacon.**—A **Manchester, England,** provision firm desires to correspond with shippers of Canadian bacon.

115 **Box Boards.**—A **Lancashire, England,** firm of soap manufacturers asks for dimensions and prices of box boards from Canadian shippers.

116 **Butter.**—One of the oldest import houses in **St. John's, Newfoundland,** would be glad to hear from Canadian creameries who would be willing to deal with them direct. They are prepared to buy in large quantities for cash, and give a Canadian bank reference. Prices f.o.b. Montreal.

117 **Cheese.**—A merchant and manufacturer's agent in the **Island of Malta,** would like to hear from Canadian manufacturers of white and colored cheese, requiring sole representation in that district. Prices to be c.i.f. Malta, 25 per cent. against documents and 75 per cent. 60 days after arrival. Bank and commercial references supplied.

118 **Cider.**—A **Lancashire, England,** firm ask for prices c.i.f. Manchester of Canadian cider in casks.

119 **Clothes Pins, Etc.**—A **Manchester, England,** firm with large connection asks for prices of clothes pins and towel rollers.

120 **Codfish.**—A **London, England,** agent engaged in the Spanish trade, and offering good references wishes to get into direct touch with Nova Scotian firms with a view of arranging for the direct import of dried codfish into Spain.

121 **Dog Fish.**—A **Bristol, England,** firm would like to hear from Canadian exporters of dressed dog fish to be used as fertilizer.

122 **Dried Codfish.**—An Italian firm in **London, England,** desires addresses of Canadian shippers of dried codfish suitable for the Italian market.

123 **Flooring.**—A manufacturers' agent in the **City of Mexico** desires to form connection in Canada with manufacturers of hardwood and pine flooring, also sashes, doors and blinds.

124 **Flour.**—A **Lancashire, England,** firm of flour importers asks prices of best first patents flour c.i.f. Manchester from Canadian exporters.

125 **Handles.**—Quotations are invited by an old established house in **Liverpool, England,** on carload lots of basswood broom handles, 50" x 1⅛", ash stems, hay fork, manure fork and D shovel handles, delivery to be c.i.f. Liverpool, and payment to be made by 60 day draft.

126 **Leather Board.**—Samples of leather board required for a new departure are supplied by a firm in **Liverpool, England,** who state that large quantities are likely to be required. They are prepared to buy for cash and give British bank reference. Prices are asked c.i.f. Liverpool.

127 **Pick Handles.**—A **orkshire, England,** firm desires to get in direct communication with manufacturers and shippers of pick handles, for which they have a large demand. Correspondence and quotations invited.

128 **Pine Doors.**—A **Cheshire, England,** firm asks for prices and dimensions of pine doors from Canadian manufacturers.

129 **Staves.**—A firm in **Cornwall, England,** would be glad to be put in touch with Canadian exporters of staves.

130 **Turkeys and Poultry.**—A **Yorkshire, England,** provision firm desires to get in direct communication with Canadian shippers of turkeys and poultry for high-class trade, especially for Christmas market, and invites immediate correspondence. Best bank and commercial references furnished.

131 **Wood Pulp.**—An **Edinburgh, Scotland,** firm in direct touch with Scottish buyers is desirous to open correspondence with Canadian exporters of wood pulp of all kinds.

Competent Man Seeks Position.

,A thoroughly competent man experienced in all departments of office work is open to accept a position as office manager, credit man, or other position of trust. First-class references. Address Box A, "Industrial Canada," Toronto.

MANUFACTURERS

¶ Have you an over-supply of your goods on hand you wish to dispose of?

¶ Do you wish to establish and exploit a certain line of goods, or a name or a trade mark?

¶ Do you wish to test fully and fairly the efficacy of Daily Paper advertising as a factor in selling your goods?

¶ Do you wish to enlarge the number of your Customers, and to make your Company a more "going" concern than ever.

If so

The News

MAKES YOU THIS PROPOSITION

It is a reasonable one, because it gives you an opportunity to do all of the above, without binding you down to a heavy contract which **must be used whether you find it a paying investment or not.** Send on the Copy you wish to use. No Contract is required — It will receive the most careful attention—all means will be used to make it draw. You will be charged **4 cents per line or 56 cents per inch** for just the amount of space **you wish to use.** If after a fair trial you find it does not pay—withdraw it—if it pays—enlarge your space. In this way you demonstrate at no risk whether advertising will be a paying feature in your business.

The chances are all in your favor. Write to The News for fuller information or **send on your Copy.**

THE NEWS - TORONTO

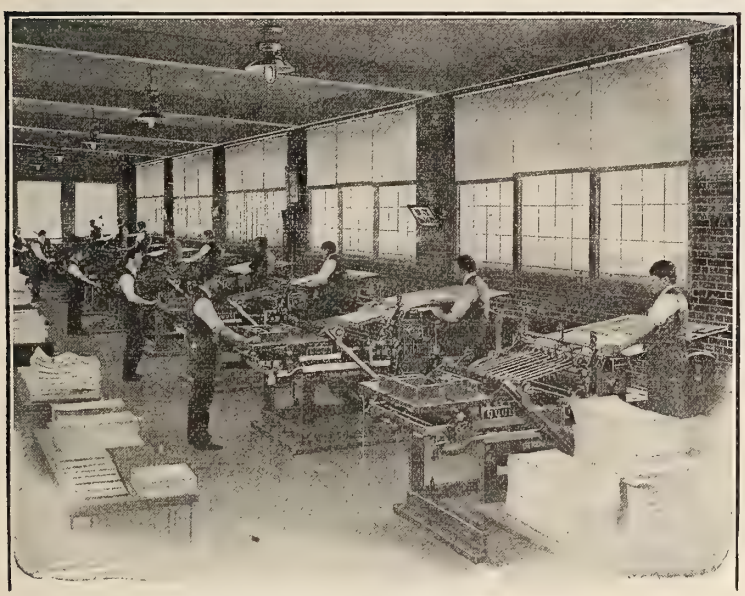
The Making of a System

To be able to design a system that will simplify and expedite the handling of business details is one important item, and to have facilities that will manufacture these designed systems with celerity and accuracy, is another no less important.

We have entirely covered both requirements. Our factory, the largest of its kind in the British Empire, is an ideal one—plenty of air, room and light. It is equipped with the most modern, labor-saving machinery, driven by individual motors, every part of the plant being in the hands of skilled artisans, making possible the quick and unerring handling of any work.



One battery of Ruling Machines in our Canadian factory.



One battery of presses in our Canadian factory.

The staff of experts who design our Systems for Business, have been educated in the great school of Practical Experience, and their work for our ten thousand customers is a guarantee that *your* work will be properly executed if entrusted to us.

It doesn't matter whether it is wholesale, manufacturing, retail, financial, or a professional business, we have systems for any one of them that will simplify and make methodical the accounting, facilitating the general work of handling business details. Write us to-day. One of our experts is somewhere near you, and he knows the systematizing business down to the ground.

The Copeland-Chatterson Co., Ltd.

Devisers and Manufacturers of Systems for Business

General Office: TORONTO

MONTREAL: Liverpool & London & Globe Bldg.
WINNIPEG: - - - 141 Bannatyne Ave. East
OTTAWA: - - - - - 14 Citizen Bldg.
LONDON, ENG: - - - 43 Cannon St., E.C.
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The Gendron Mfg. Co. Limited

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CARRIAGES, GO-CARTS
And SPRING LINE
Now Ready.

Our line is larger than ever.
Designs of the latest creation.
Finish and workmanship cannot be surpassed.
Travellers now on the road.

The Gendron Mfg. Co.,
LIMITED.
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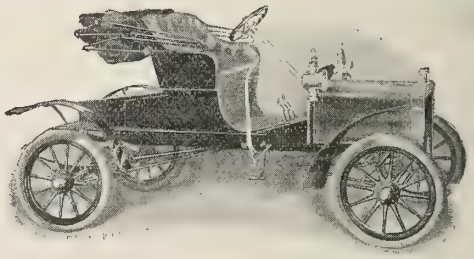
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STEEL SHIPBUILDERS, ENGINEERS
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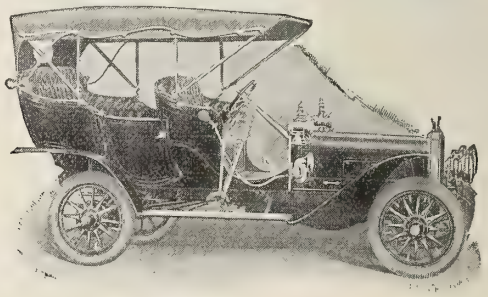
Hydraulic and Dipper Dredges, Steel and Composite Steamers and Yachts, Marine and Stationary Engines and Boilers.

OFFICE AND WORKS
Esplanade Street East
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4 Cylinder Runabout **THE FORD** 6 Cylinder Touring Car



Model N. 4 cylinder vertical 15 H.P. 84 in. wheel base. Speed, 40 miles. Weight, 800. Direct bevel gear drive. **Price, $650.00.**



Model K. 6 cylinders vertical 4½ x 4¼. 40 H.P. Speed, 50 miles per hour to 4 miles on a high gear. Improved planetary transmission. 114 inch Wheel Base. Perfected magneto ignition. Mechanical oiler. Weight, 2,400 pounds. **Price, $3,200.00.**

Write for full particulars about these two famous Cars

The Ford Motor Co. of Canada, Ltd.
WALKERVILLE, ONTARIO

TRACK AND RAILWAY SUPPLIES

HAND CARS - PUSH CARS

TRACK SCALES

BAGGAGE SCALES STOCK SCALES

SCREW JACKS RATCHET JACKS

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TRACK DRILLS WRECKING INCLINES

SEMAPHORE AND SWITCH STANDS

A full line of specialties made by **BUDA FOUNDRY AND MFG. CO.**
carried in stock by

CANADA FOUNDRY CO.

LIMITED

Head Office and Works: TORONTO, ONT.

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THE
CANADA PROCESS COMPANY
Limited

Manufacturing and Importing Chemists

Office and Works: QUEEN'S WHARF

BATHURST ST. TORONTO

SPECIALTIES:

CARBONIC ACID GAS "ZENITH BRAND"
GLAUBER'S SALT
HYPOSULPHITE OF SODA
BISULPHATE OF SODA
SULPHURIC ACID
MURIATIC ACID
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And Specialties for Tanning, Dyeing, and Woollen Industries

EVERYTHING THE HIGHEST QUALITY

DON'T FORGET THE NAME

The Canada Process Company, Ltd.

QUEEN'S WHARF, BATHURST STREET, TORONTO

THE E.B.EDDY WARES

HERE SINCE 1851

Counting



House

THE E. B. EDDY COMPANY

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HULL :: CANADA

Branches and Agencies at Montreal, Toronto, Halifax, Quebec, Ottawa, Hamilton, London, Kingston, Brockville, St. John, N.B., Winnipeg, Victoria, Vancouver, Calgary, Edmonton.

MANUFACTURERS OF AND WHOLESALE DEALERS IN

MATCHES, PAPERS, PAPER BAGS, WOODENWARE, FIBREWARE, WASHBOARDS, &c.

We wish to direct special attention to the pink tipped

"SILENT"

PARLOR MATCH

Our latest production in this line. Being **perfectly noiseless** and **absolutely safe** and **sure,** its excellent points are at once apparent.

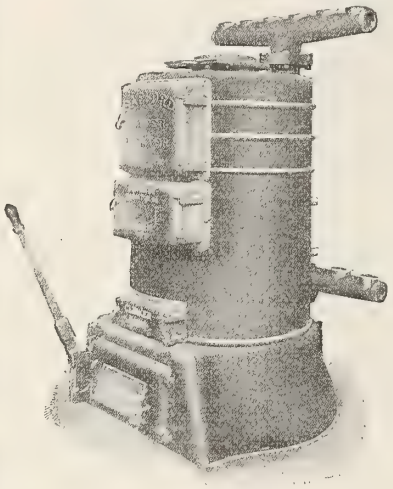
ASK YOUR GROCER FOR A BOX.

This, as well as all our other well known brands are for sale by first-class Dealers everywhere.

ALWAYS, EVERYWHERE IN CANADA, ASK FOR EDDY'S MATCHES

The "Safford" Hot Water Boiler

Has developed a higher efficiency and greater heating capacity, relative to its fuel consumption, than any other Boiler on the market. It meets every requirement of up-to-date Hot Water Heating, and can be relied upon to perpetuate that enviable reputation which the "Safford" Radiator now enjoys.



Its fire-pot is constructed to hold sufficient coal to provide ample water circulation for proper amount of radiation, for not less than 8 hours with least amount of caretaking.

A certain volume of the hottest water quickly circulates upward directly to the mains and radiators, without circulating through all the sections, thus insuring quick results at radiators.

It has cast-iron machine turned nipple joints, insuring a perfect joint, and obviating the necessity of taking down the Boiler every few years to be regasketed or repacked.

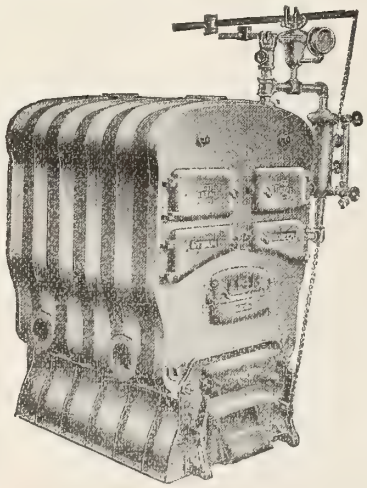
It is very low in construction permitting its erection in low cellars without a pit.

It illustrates economy of fuel in the highest degree.

Only scant attention needed to the firing.

The "Triumph" Steam Sectional Boiler

Is the climax of scientific skill in Steam Heating appliance, having the largest fire-to-water surface possible.



It maintains heat for 8 hours in coldest weather.
Maintains heat 12 to 20 hours in moderate weather.
Has ample combustion chamber between fuel line and crown sheet.
It utilizes the highest possible percentage of fuel power.
It has a large door level with grate for cleaning fire with slice bar.
An exceedingly easily managed shaking and dumping grate.

The "Safford" Hot Water Boiler or the "Triumph" Steam Boiler when combined with "Safford" Radiators form a matchlessly satisfactory and economical heating system for the largest Institution or the smallest house,—a heating system that rightly merits and wins the unqualified commendation of both heating engineers and users.

Illustrated Catalogue mailed free to any address on application.

THE DOMINION RADIATOR CO., LIMITED

HEAD OFFICE: TORONTO

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ILLVSTRATORS
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"Canadian Club" Whisky

Fully Ripened in Wood. Age Guaranteed by Government

QUALITY UNEXCELLED

Distilled and Bottled by

HIRAM WALKER & SONS

LIMITED

Walkerville, Canada

LONDON CHICAGO NEW YORK MEXICO CITY VICTORIA, B.C.

TWO STRONG REASONS

Why you should stock "Five Roses" Flour are these:

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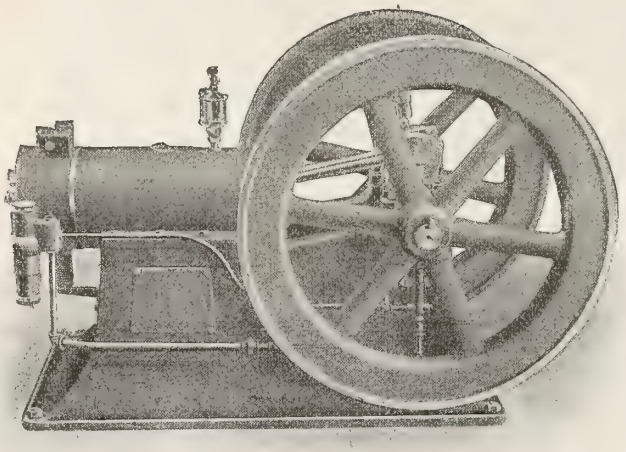
IF YOU DO NOT ALREADY HANDLE IT SEND US A TRIAL ORDER TO-DAY AND PROVE THE TRUTH OF THE ABOVE STATEMENTS.

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LIMITED.

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The only Gas and Gasoline Engine that runs either way.

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SIMPLE AUTOMATIC RELIABLE

STANDARD BOILER FEEDER OF THE WORLD

TRADE

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MARK

STANDS WITHOUT A RIVAL

ECONOMICAL INJECTOR DURABLE

Manufacturers Frequently Ask Us

"Why is not Our Own Inventory just as good as Your Appraisal?"

There are several reasons why it is not. One reason is that it requires skill, experience and constant practice to properly perform any work; it is not likely that a first-class wagon maker could make any other than a very indifferent watch; for the same reason your first-class clerks and foremen lack the skill, experience and **Constant Practice** necessary to make a complete record of your property.

Your own inventory is taken by men whose ordinary business it is **to do something entirely different;** our appraisal is taken by men whose every-day business it is **to do nothing else.**

Your own inventory is undoubtedly incomplete and inaccurate on account of the very way in which it is taken; and **you probably do not know** of its incompleteness and inaccuracy **because you have never examined it thoroughly.**

You have received it from your employees' hands much as the darky preacher took in his new convert "on suspicion"; but you have not looked into its merits as you would look into **the merits of our appraisal.**

Why? We leave it to you to answer; **we only state the facts. Is YOUR OWN INVENTORY any good?** Yes, even an imperfect inventory possesses some value, but why not have **a fine Inventory as well as fine tools.** It is just as necessary.

Your own inventory shows you what the articles **cost you** at the time of purchase, less depreciation; our appraisal shows **what it would cost to replace them at present prices, what the insurance value is and what the cash value is to a "going" concern.**

Your own inventory shows a lump sum estimated value of your buildings. Our inventory shows a detailed actual value of all the items of construction.

Your own inventory is not verified by plans, while ours is. **Your policies require this.**

Your own inventory may be good, but ours is much better.

Your own inventory may be as accurate, but **not as good** as it can not be disinterested.

This is another case in which it pays to have the best.

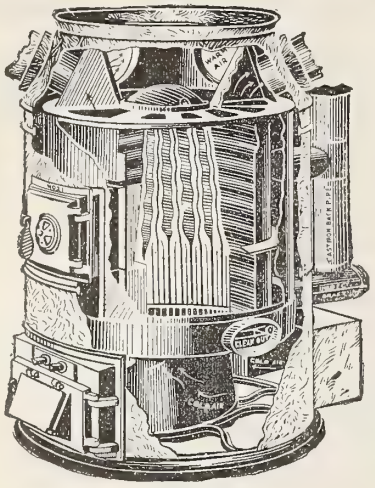
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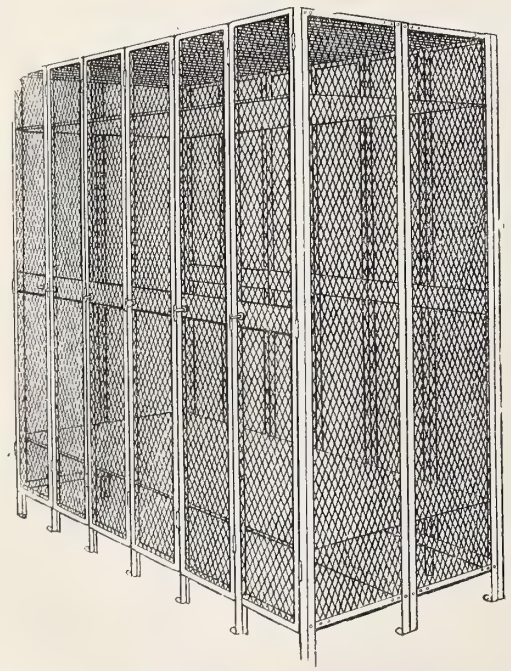
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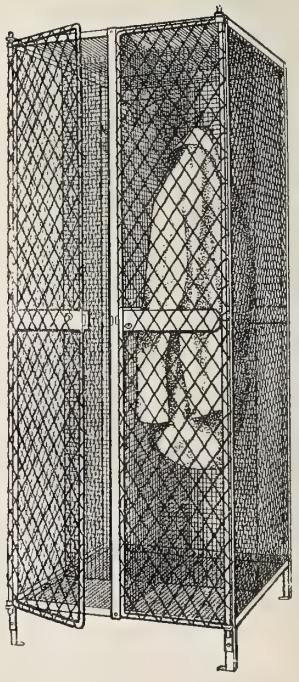


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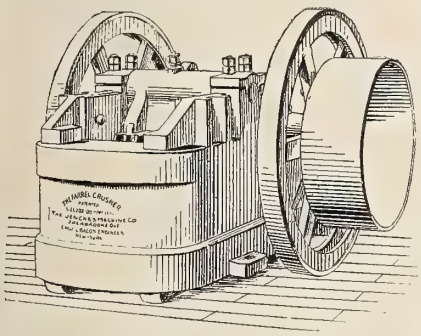
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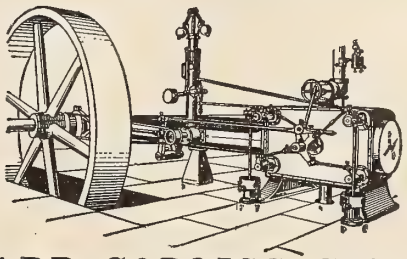
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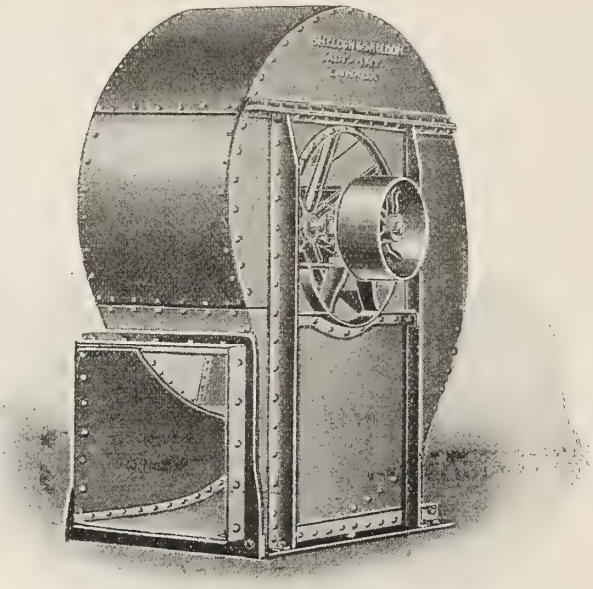
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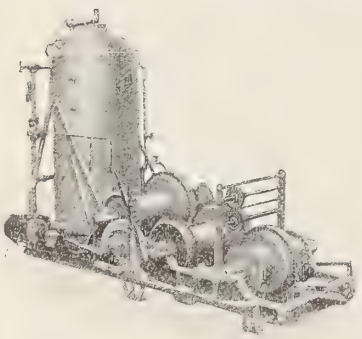
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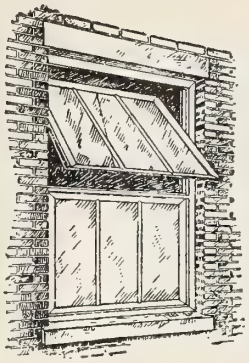
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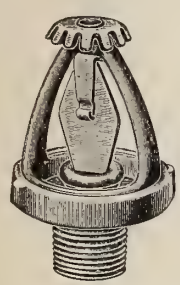
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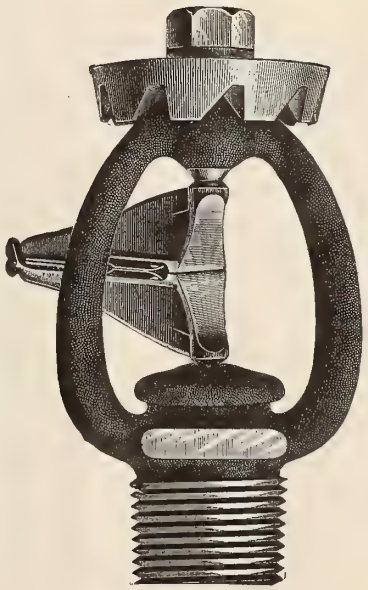
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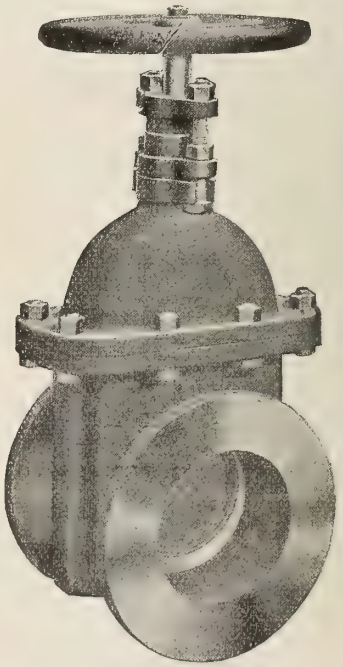
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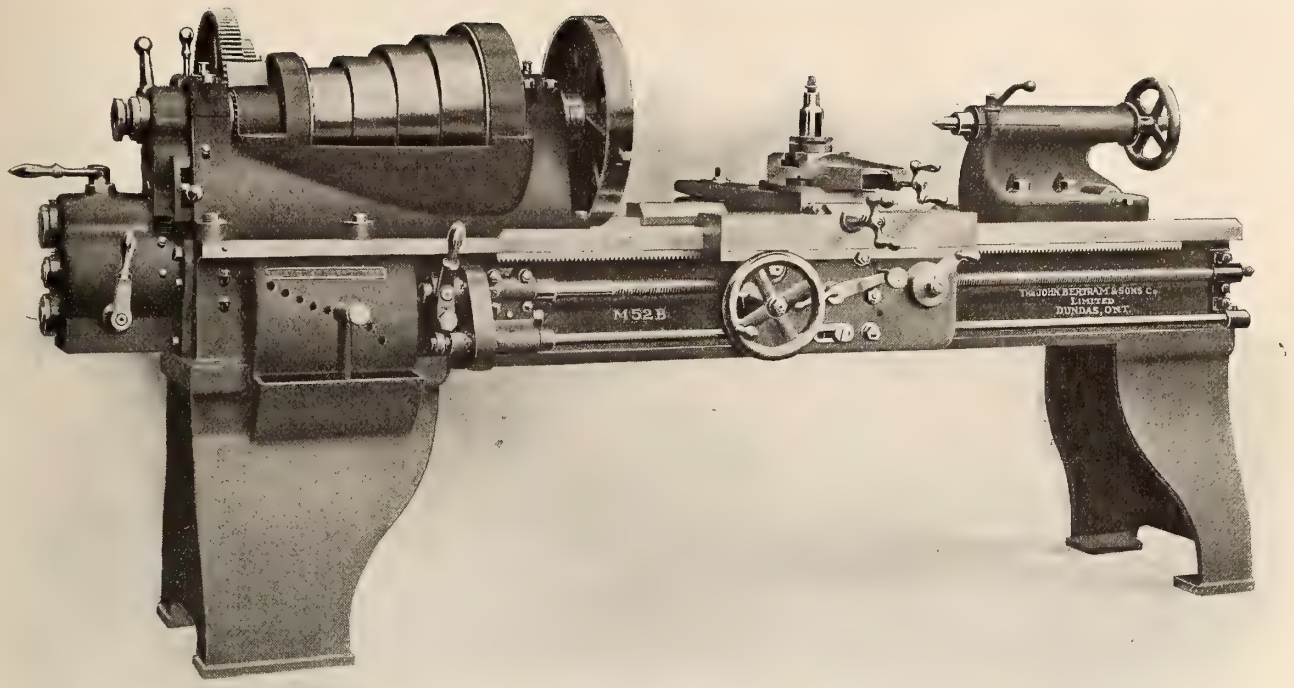
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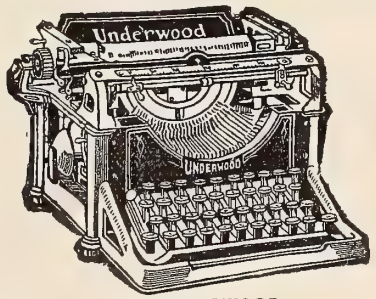
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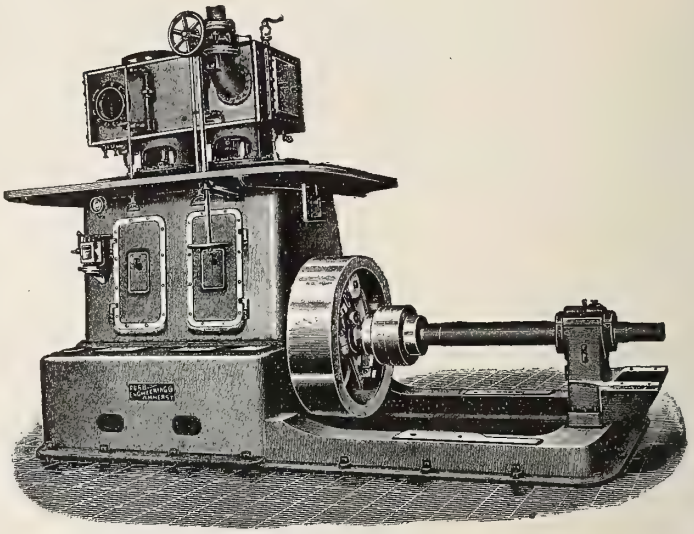
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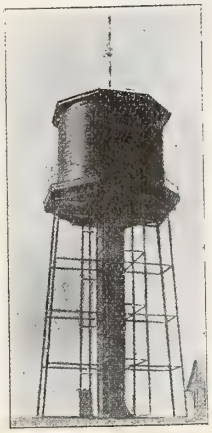
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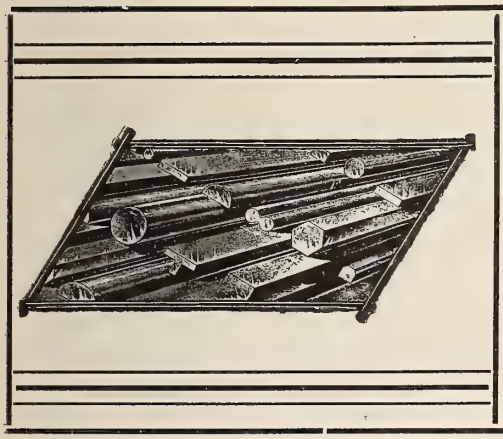
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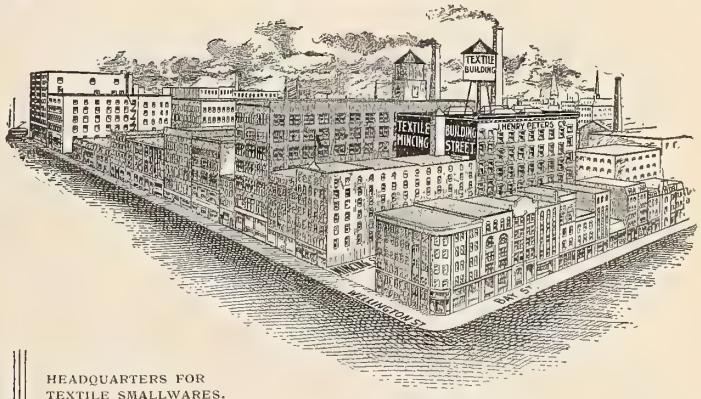
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EXECUTIVE COUNCIL

NOVEMBER MEETING

A meeting of the Executive Council of the Canadian Manufacturers' Association was held in the Board of Trade Rooms, Toronto, on November 15th, 1906.

In the absence of the President, the Vice-President, Hon. J. D. Rolland, presided.

Members of the Council present were: Messrs. Henry Bertram, Dundas; Geo. Booth, Toronto; Geo. Brigden, Toronto; P. H. Burton, Toronto; Jas. Davidson, Montreal; L. V. Dusseau, Toronto; John F. Ellis, Toronto; Thos. Findley, Toronto; John Firstbrook, Toronto; H. W. Fleury, Aurora; Lloyd Harris, Brantford; Sam Harris, Toronto; S. R. Hart, Toronto; E. G. Henderson, Windsor; T. S. Hethrington, Quebec; J. H. Housser, Toronto; J. I. A. Hunt, London; J. B. MacLean, Toronto; Jas. Maxwell, St. Mary's; R. McLaughlin, Oshawa; D. Murphy, Ottawa; J. P. Murray, Toronto; J. A. Publow, Hamilton; Carl Riordon, Merritton; Thos. Roden, Toronto; A. S. Rogers, Toronto; J. D. Rolland, Montreal; W. H. Rowley, Ottawa; J. T. Sheridan, Toronto; J. M. Sinclair, Toronto; F. J. Smale, Toronto; H. Stroud, Paris; A. W. Thomas, Toronto; W. B. Tindall, Toronto; R. L. Torrance, Guelph; C. I. I. Wilson, Ingersoll.

Communications were received as follows:—

1. From Messrs. H. Cockshutt, Brantford; C. C. Ballantyne, Montreal; R. J. Younge, Montreal; P. Hamill, Montreal; Wm. Smaill, Montreal; Geo. E. Amyot, Quebec; A. W. White, London; T. J. Storey, Brockville; D. J. Fraser, St. Johns; A. A. Dechene, Quebec; C. S. Meek, Toronto; W. K. George, Toronto; W. K. McNaught, Toronto; Wm. Stone, Toronto; J. S. N. Dougall, Montreal, regretting that they were unable to be present at the meeting.

2. From Mr. D. J. Fraser, St. Johns, Que., suggesting that the Council hold its November meeting in Montreal. The Secretary explained that the time was too short to adopt Mr. Fraser's suggestion, but that the President, Mr. Cockshutt, favored holding a meeting of the Council in Montreal at a later date

Messrs. J. H. Housser, Geo. Brigden, C. S. Meek, W. K. George, A. S. Rogers, and T. A. Russell, chairmen of different standing committees, had also advised the Secretary that they approved of the idea.

On motion of Mr. Lloyd Harris, seconded by Mr. Geo. Booth, it was decided to hold the January meeting in Montreal.

REPORTS OF OFFICERS AND COMMITTEES.

Treasurer's Report.—Mr. George Booth, Treasurer, presented a statement showing the financial position of the Association up to November 1st. The same was considered satisfactory, and was adopted on motion of Mr. Booth, seconded by Mr. Thos. Roden.

Secretary's Report.—Mr. J. F. M. Stewart, Secretary, reported briefly on Association work during the past month, and informed the Council that the decision of the Annual Meeting to tender Mr. C. C. Ballantyne a complimentary banquet had been carried out. Arrangements for the same had been undertaken by the Montreal Branch, and the banquet, which was held on November 13th in Montreal, was successful from all standpoints.

FINANCE.

The report of the Finance Committee was presented by Mr. J. F. Ellis. The report made the following recommendations:—

1. That the monthly accounts of the Association as presented be paid.

2. That the Council decide that two constitute a quorum for meetings of the Finance Committee.

3. That the lease for premises in the Traders Bank Building be signed.

4. That the Executive Council consider the discussion and understanding arrived at in Winnipeg to the effect that the President's expenses while visiting the Branches of the Association should be paid. The President expressed himself as opposed to this principle, and the Finance Committee supported this decision. It was recommended that the Council put itself on record as being unfavorable to paying the President's expenses.

The Committee reported that they were arranging for decorating and furnishing new offices.

The fourth recommendation regarding the principle involved in the payment of the President's expenses was discussed at length.

It was moved by Mr. E. G. Henderson, seconded by Mr. W. H. Rowley, that this recommendation in the Finance Committee report be struck out.

Messrs. J. F. Ellis, W. B. Tindall, A. W. Thomas, R. McLaughlin, J. P. Murray, Thos. Roden, and Geo. Booth supported the report, while Messrs. W. H. Rowley, E. G. Henderson, and Thos. Findley supported the amendment. Being put to a vote, the report was adopted.

COMMERCIAL INTELLIGENCE.

The report of the Commercial Intelligence Committee was presented by Mr. J. P. Murray.

The report was as follows:—

New Zealand Exhibition.

"A letter was received from the Chairman of the Executive Commissioners of the New Zealand International Exhibition, expressing his satisfaction at the representative exhibit forwarded from Canada, and his appreciation of the services rendered the Exhibition by the Association through Mr. deSchryver, Mr. Younge, and Mr. Stewart. The Committee decided to publish this letter in INDUSTRIAL CANADA."

New Zealand Commissioner.

The New Zealand representative of the Association, Mr. deSchryver, wrote to the effect that Mr. Graham Gow, the Trade Commissioner appointed by New Zealand to visit Canada, was on his way to this country, and would shortly be in Toronto. The Committee had information to the effect that Mr. Gow was at present in Vancouver. The Secretary was authorized to communicate with him and offer the facilities of the Association for procuring information, and also put him in touch with the Branch Secretaries.

Commercial Information for Emigration Purposes.

"A letter issued by the Ontario Department of Agriculture to the mayors of the different cities and towns in

Ontario asking for information regarding their respective towns for publication in the emigration literature of the Province was considered. The Secretary reported that it was the intention of the Department to publish in the near future in addition to agricultural information commercial and manufacturing information about the Province, and it was considered both advisable and desirable that such information should be given by the different municipalities.

Sample Rooms in St. Johns, Nfld.

"The Canadian Government Commercial Agent, Mr. E. D. Arnaud, pointed out to the Association a method by which United States manufacturers are disposing of their goods in Newfoundland. A number of manufacturers agree among themselves to maintain permanent sample rooms, exhibiting samples of their different products. Mr. Arnaud gave information as to how these rooms were conducted, and stated that he understood the same had been financially successful. The Committee decided to give this information to the members of the Association through the columns of INDUSTRIAL CANADA, and offer to put manufacturers interested in touch with each other.

Hague Conference.

"This matter was brought to the attention of the Annual Meeting and to the October meeting of the Executive Council by a telegram from Mr. H. S. Southam, of "The Citizen," Ottawa, and referred to this Committee for consideration. It was requested that the Association put itself on record as favoring the recommendation of the inter-parliamentary unions to the Hague Conference. Briefly, this recommendation is "that if a disagreement should arise between the contracting parties, which is not one to be submitted to arbitration, they shall not resort to any active hostility before they separately or jointly invite, as the cause necessitates, the formation of an international commission of enquiry, or the mediation of one or more friendly powers." The Committee respectfully ask the Council to say whether or not it wishes to put itself on record as favorable to this recommendation. The Committee have taken the liberty of inviting Mr. H. S. Southam to be present at this meeting.

Stamped Envelopes.

"In reply to representations to the Postmaster-General asking for certain improvements regarding the issue and return of stamped envelopes, a communication was received giving reasons at length why it was not feasible to adopt the recommendations at the present time. As the question originated in Montreal, this reply was forwarded to the Montreal Branch for consideration.

Trade and Navigation Returns.

"The Secretary was requested to remind the Department of Customs at Ottawa of certain recommendations which had been made by the Association, pointing out where the Trade and Navigation returns could be made more valuable by changes in the classification, and to request that these recommendations be considered when new schedules are being prepared following the tariff revision.

"A communication was received from Col. J. B. MacLean regretting that he was unable to act on the committee. Mr. MacLean's resignation was accepted, and Mr. W. L. Edmonds appointed in his place."

Dealing with that part of the report reciting the recommendation of the Interparliamentary Union to the Hague Conference, the Secretary read a communication from Mr. H. S. Southam, of Ottawa, giving reasons why the Association should put itself on record as favorable to the recommendation.

After a general discussion a motion endorsing the recommendation was carried, and the report was then adopted as a whole.

"INDUSTRIAL CANADA."

The INDUSTRIAL CANADA report gave figures showing the financial position of the paper, and informed the Council of the position of the contract with the printers for publishing INDUSTRIAL CANADA. It noted a suggestion that had been made for reducing INDUSTRIAL CANADA to standard magazine size, which was now receiving attention by the Committee.

It outlined several special articles that would appear in coming issues, and reported that an effort was being made to have regular letters forwarded each month from the Branch Secretaries.

On motion of the Chairman, Mr. Geo. Brigden, the report was adopted.

INSURANCE.

Mr. P. H. Burton reported briefly for the Insurance Committee. He informed the Council that the committee appointed to wait on the Government to secure amendments to the Insurance Act had now information prepared to present to the Government, but at Mr. Fielding's request the presentation would not be made for some time.

As a matter of information Mr. Burton reported that the provisional directors of the Eastern Canada Manufacturers' Mutual Insurance Co. and the Central Canada Manufacturers' Mutual Insurance Co. had held a meeting, and had considered the Bills drafted for the incorporation of the respective companies.

The report was adopted.

The Treasurer gave a verbal report showing the present financial position of the Insurance Department; and it was decided that the appropriation set aside for the purposes of the Insurance Department be increased by one thousand dollars.

PARLIAMENTARY.

The report of the Parliamentary Committee in part was as follows:—

Extra Provincial Corporation Taxes.

"This was brought up by a letter from Mr. R. J. Whyte, referred to the Committee by the last Executive Council meeting. The Committee decided that no further action could be taken to advantage at present, as the resolution of the Provincial Premiers could not be made effective until the Legislatures met.

Deportation of Silver Coinage.

"Following the resolution of the Annual Meeting favoring the continuance of the deportation of silver coinage, the Committee investigated the agreement between the Government and the Bankers' Association and learned that the Government paid the banks three-eighths of one per cent. for collecting United States silver, and paid the express charges to New York. They also ascertained that the amount of silver sent out of Canada under this arrangement was $576,000, the whole cost of the service being estimated to be in the neighborhood of $3,000. The Committee have called the Government's attention to this small cost, and have urged that the arrangement with the Bankers' Association be again made effective.

Ontario Assessment Act.

"A circular has been distributed to all of the Ontario members of the Association, asking for their views on the present Ontario Assessment Act. A large number of replies have been received, and will be considered before the December meeting of the Council.

Pawn Brokers.

"The Association has on several occasions recommended the Provincial Government to amend the Act respecting Pawn Brokers, so as to make it more difficult for stolen goods to be pawned. Mr. W. K. McNaught undertook to present the resolution of the Association to the Government, and arguments are now being prepared."

The Committee unanimously decided to request the following members of the Association to lend their assistance to the committee work during the coming year:—Messrs. T. A. Russell, A. E. Kemp, Wm. Stone, and George Anderson.

On motion of the Chairman, Mr. A. S. Rogers, the report was adopted.

RAILWAY AND TRANSPORTATION.

Mr. J. H. Housser, Chairman of the Railway and Transportation Committee, was unable to remain until his report was called, and it was presented by Mr. J. R. Marlow, and on motion of Mr. Lloyd Harris, seconded by Mr. R. L. Torrance, was adopted. The report is as follows:—

The regular monthly meeting of the Railway and Transportation Committee was held in the Association offices on Wednesday, November 14th.

Discrimination in favor of the United States.

Mr. Marlow reported that he had attended a hearing of the Railway Commission at Montreal on the 8th inst., at which the railways presented an outline of their plan to overcome the discrimination complained of in favor of United States and against Canadian shippers on east-bound traffic. The plan involves the adoption of the Canadian Classification for all traffic from United States points instead of the Official United States classification at present in use, and complete change in the rate scales both from United States and from Canadian points on east-bound traffic. Generally speaking there will be a reduction from Canadian stations, while on the other hand there will be increases on United States traffic handled at class rates. It is not proposed to disturb commodity rates or present rates on raw materials for manufacturers. The date and figures relating to the question cover about one hundred pages of foolscap and will require very careful study before your Committee will be able to report intelligently.

Traffic Forms.

Advices from the Railway Commission intimate that the conference re traffic forms will be called this month.

Demurrage.

In accordance with the resolution of the Committee at its last meeting a formal application has been sent to the Railway Commission for a system of detention or reciprocal demurrage charges against railway companies for delay in supplying cars, moving loaded cars, and delivering same at destination, before the present provisional rules are permanently approved.

Certain amendments to the rules relating to bunching freight and freight held out on account of non-payment of charges have also been asked for.

Delays to L. C. L. Freight.

Communications were read from two members, complaining of delay to less than carload freight. After careful consideration it was the opinion of the Committee that these matters were local in character and it would be better that the individual members should deal direct with the railway companies respecting the same.

Advertising on Freight Cars.

Communication from Mr. Whyte referred to the Committee at the last meeting of the Executive Council was considered. The Manager of the Transportation Department discussed the matter with the Canadian Freight Association and reported that they were endeavoring to prevent advertising on freight cars. They also stated the American railways intended to appoint a committee to deal with the subject. Your committee decided to defer recommendations until further information could be obtained as to the intention of the railways.

Classification Adjustments.

The Manager of the Department reported that the following adjustments of complaints regarding classification:—

Wall and counter show cases now classified three times first-class are to be reduced to double first-class.

Saddlery hardware of iron and steel now classified fourth-class in carloads is to be reduced to fifth-class.

Wooden water tanks, vats and cisterns now classified fifth-class in carloads are to be reduced to sixth-class.

Meat choppers and curry combs now excluded from the hardware cars are to be accepted in such mixed cars on a fifth-class basis.

Classification Matters Pending.

The application with regard to the classification of stoves in less than carloads is to be dealt with at a special meeting of the Railway Classification Committee on the 20th, when it is expected amendments will be arranged.

Request has been made to the railways for reduced ratings on lounges, bureaus, washstands and kitchen tables knocked down in less than carloads.

Applications for intermediate ratings on threshing machines and engines; also for rates on old engines returned for repairs, were declined by the Canadian Freight Committee, but have been further discussed with the Advisory Committee of the Freight Association who have promised to carefully reconsider both proposals.

RECEPTION AND MEMBERSHIP.

The Reception and Membership Committee recommended the acceptance of ten applications for membership, the names of which are published in another column. The report also outlined the plans that would be taken to increase the membership.

The report of the Montreal Branch was read by the Secretary, and is published in another column.

The report of the Toronto Branch was given verbally by the Chairman, Mr. John Firstbrook.

Major Hethrington, of Quebec, Chairman of the Quebec Branch, made a verbal report on the work in his city.

Printing of Reports.

Mr. E. G. Henderson again suggested the importance of having committee reports printed for consideration at the Council meeting. It was the understanding of the Council that the Secretary should do this where it was feasible and advisable.

Under the head of "New Business," it was moved by Mr. Lloyd Harris, seconded by Mr. W. H. Rowley, that the Parliamentary Committee take steps to have the Dominion or Provincial Governments measure the minimum flow on each stream in which there is a possibility of water development, during low water period, and have such measurements recorded for present and future reference. This was carried.

The meeting then adjourned.

MONTREAL BRANCH.

The Montreal Branch had a month of great activity. Three meetings of the Executive Committee were held in addition to a large number of meetings of sub-committees.

A proposal now before the City Council to grant a thirty-year extension of the gas franchise of the Montreal Light, Heat and Power Co. came up for discussion at the regular meeting of the Committee on November 8th. The proposition of the Company was to give a 90 cent rate for gas for thirty years, beginning in 1910. Associated with this was an offer to give a cash discount for electric light and power beginning in 1910. An additional clause, however, provided that no other company must have any power to lay gas mains in the streets, or supply electric current to the citizens.

The matter was of such importance that a special meeting of the Committee was called on November 12th to consider it, and a strong resolution was passed and forwarded to the City Council, reaffirming the resolution of 1904, and urging the city to take steps to obtain an arbitration value upon the gas plant in case of it being considered advisable by the proprietors of the city to expropriate the Company's plant when the contract expired in 1910; and further, strongly protesting against the city allowing any company to obtain a monopoly of the electric light or power supply.

The complimentary banquet to Mr. C. C. Ballantyne took place in the Canada Club, Montreal, on November 13th, and proved a splendid success, nearly two hundred people being present, including representatives of the Dominion Cabinet, Provincial Government, and the commercial interests of the country.

NEW MEMBERS.

Passed by the Executive Council, November 15th, 1906.

BELLEVILLE, ONT.

Toronto & Belleville Rolling Mills, Limited.—Iron and Steel Horse Shoes, etc.

Toronto & Belleville Rolling Mills, Limited.—(T. Moore, 2nd member).

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TORONTO.

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MacLean Publishing Co.—(W. L. Edmonds, 3rd member).

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WELLAND, ONT.

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DISCUSS VIADUCT SCHEME.

The elevation of tracks along the Esplanade was discussed at the second luncheon, held by the Toronto Branch of the Canadian Manufacturers' Association on November 21st. The continued interest taken by the leading manufacturers of Toronto in civic improvements is a most hopeful sign. The dining-room was well filled when Mr. John Firstbrook took the chair.

The discussion was opened by Mr. J. S. Willison, who argued strongly for the raising of the tracks and the building of viaducts. The work he estimated would cost at least $3,000,000, but a few years hence it would cost much more than this. He felt that the city should contribute to the cost of the work. The first requisite was for a complete report from an engineer on the requirements and cost. When this was secured the City Council would be in a fair position to lay the question before the electors.

Following Mr. Willison, Mr. D. E. Thomson spoke, outlining what had been done in previous movements aimed at the same end. He mentioned the difficulties which had been encountered in persuading the railways and the public of the necessity of the work. Mr. R. A. Donald supported the viaduct scheme in a vigorous speech. He discussed the many advantages which would come from track elevation. As it was now, there was little use made of our water facilities. Given better access to the water-front, transportation by boat would be greatly increased. For handling coal the elevated tracks would be of distinct advantage. For all shipping, receiving floors could be provided on a level with the elevated structure. The shunting which would be necessary on the lower level might be done at night.

Mr. A. E. Kemp felt that the difficulties to be faced were probably greater than was anticipated. He referred particularly to the large amount of work which of necessity would have to be done on the ground level.

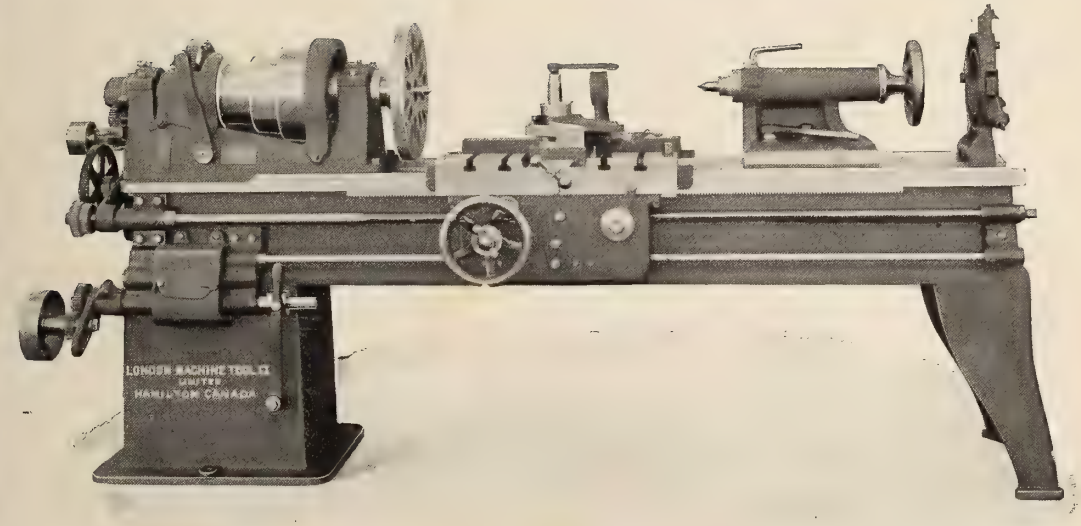
Other speakers, all of whom strongly supported the viaduct scheme, were Mr. Peleg Howland, President of the Board of Trade, and Mr. A. C. Steele, Chairman of a Committee of the Board of Trade, on the subject.

The appointment of a commission to outline a national system of education for workmen and artisans should be an early work of the government.

Vol. VII. No. 6 JANUARY, 1907 $1.00 per year

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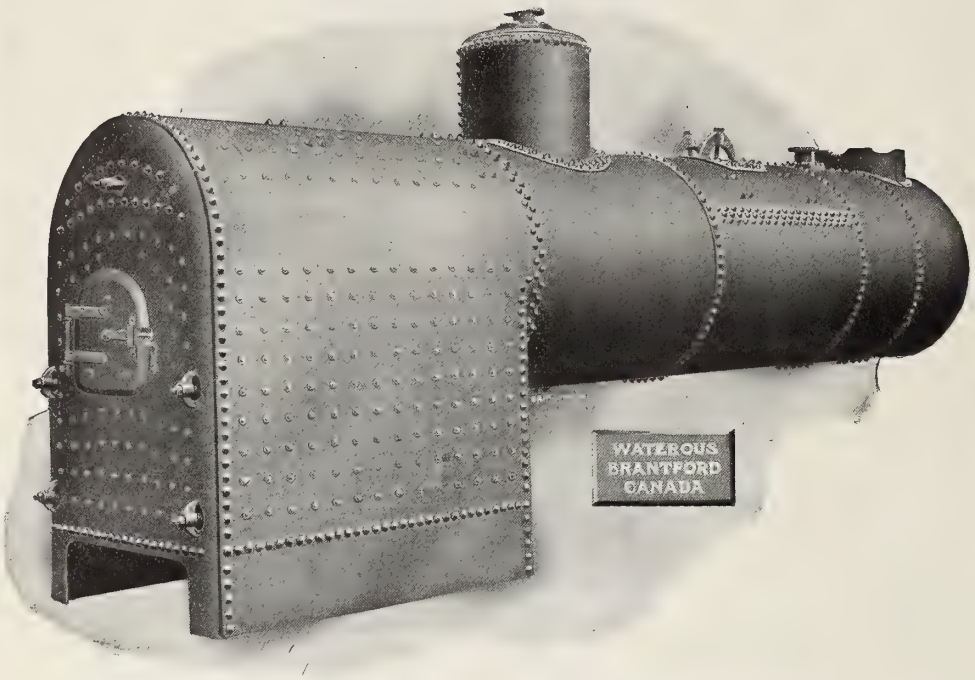
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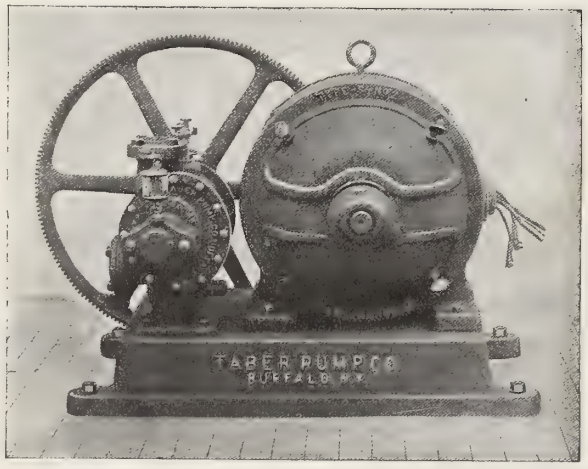
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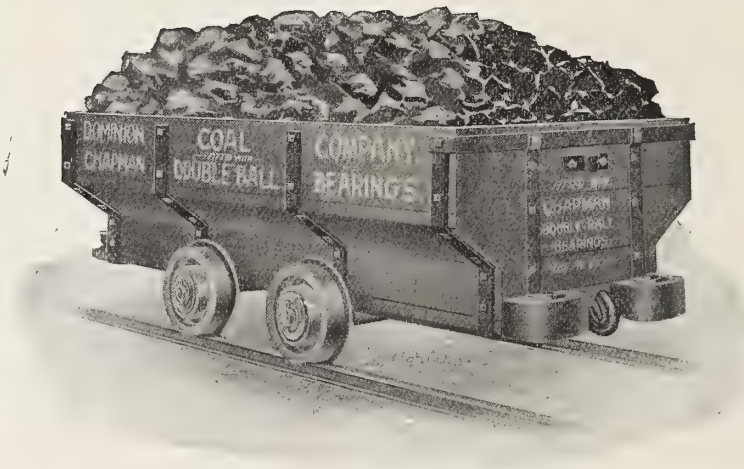
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We issue the regular standard policy free from assessment liability or any other undesirable feature.

The surplus has increased substantially since the first of January. The company has suffered no conflagration losses in San Francisco or elsewhere.

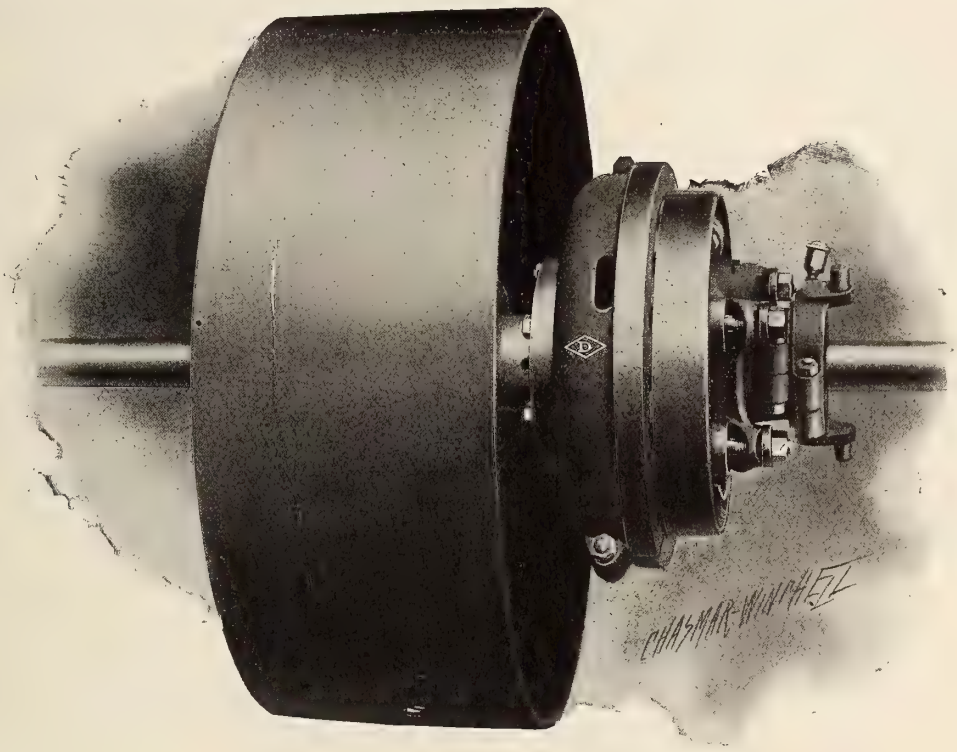
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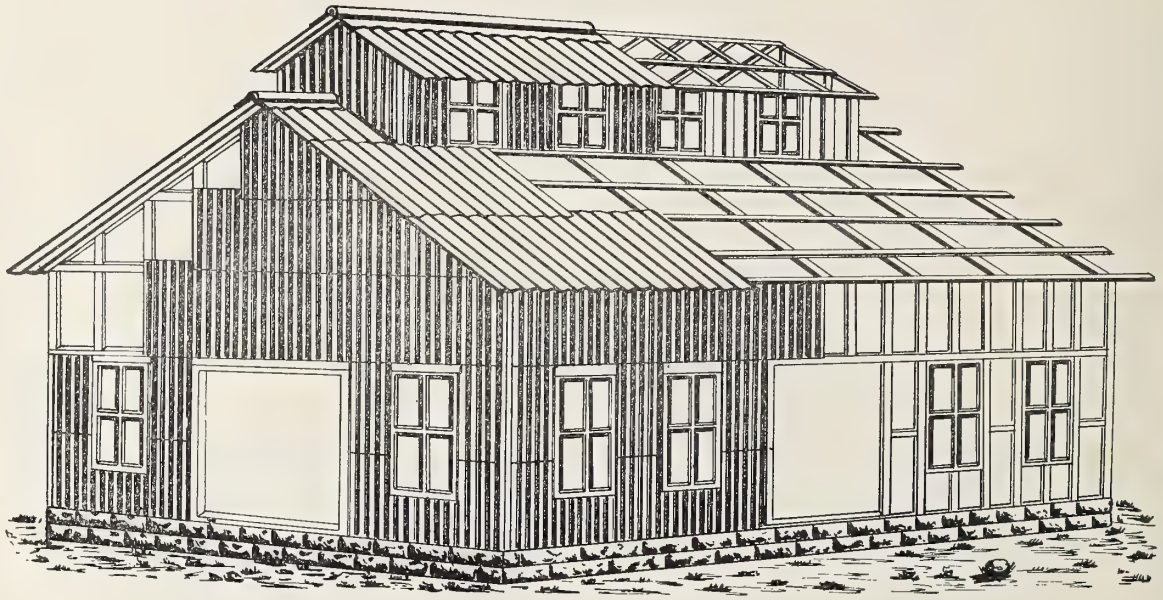
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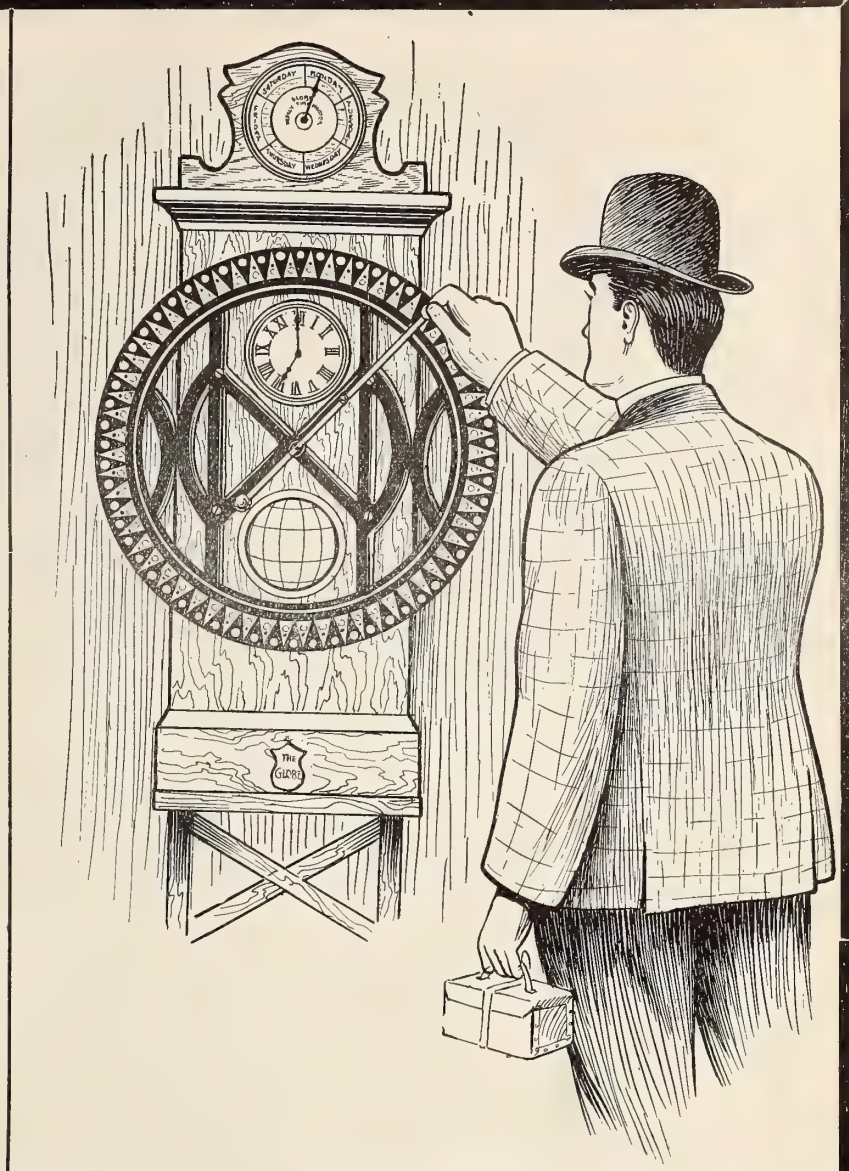
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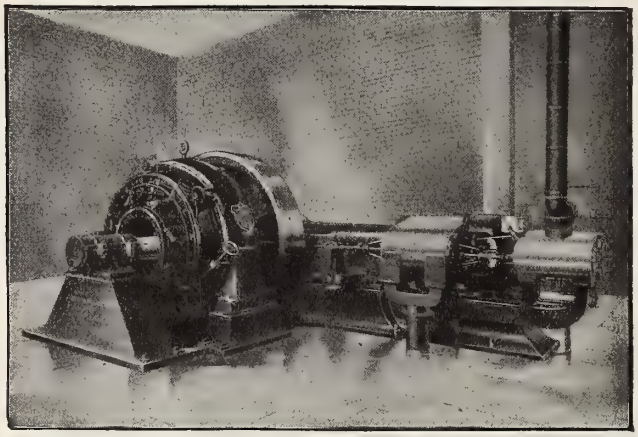
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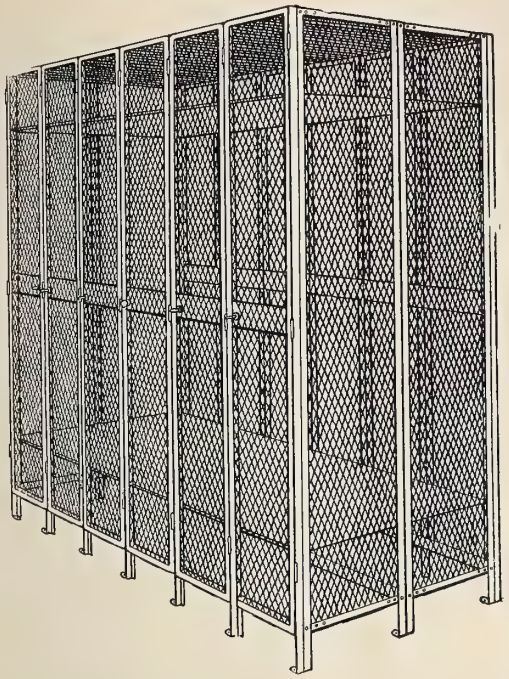
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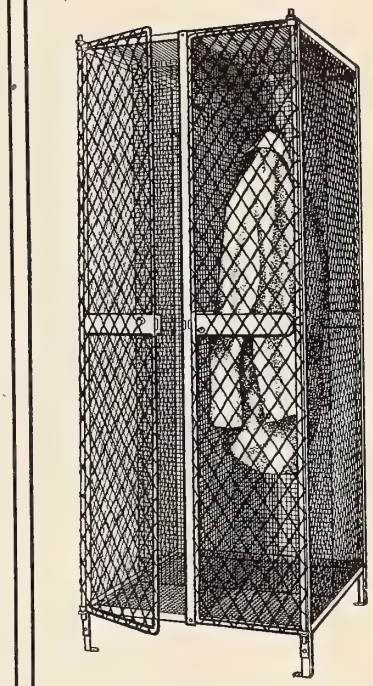


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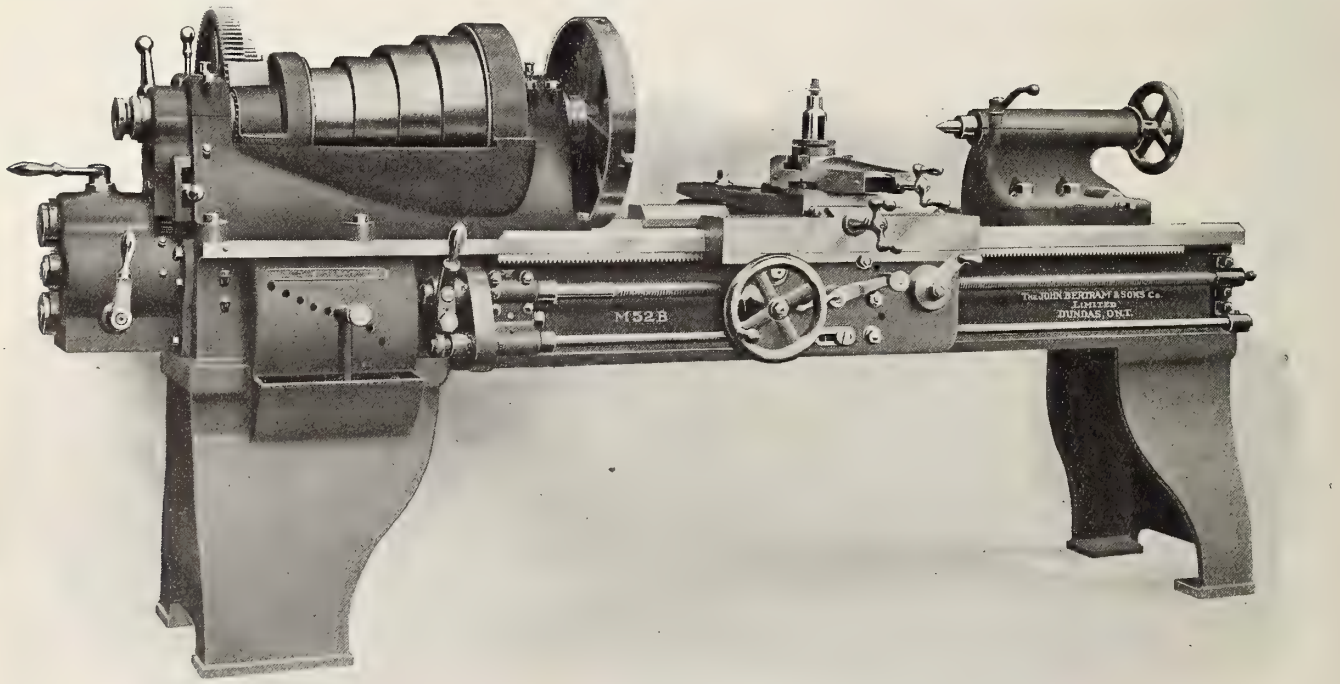
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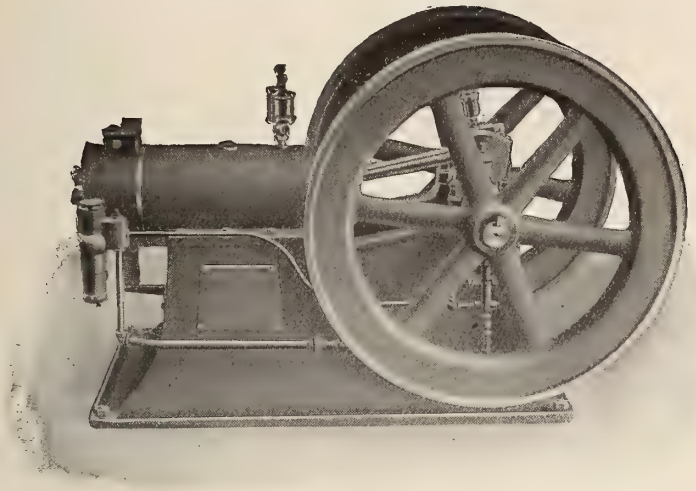


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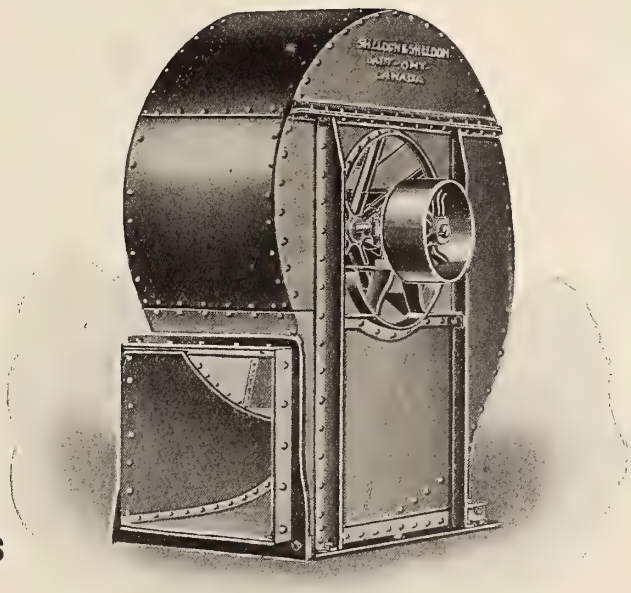
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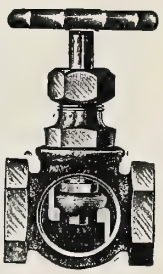
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Vol. VII. TORONTO, JANUARY, 1907. No. 6.

INDUSTRIAL CANADA

Issued monthly as the the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

COMMITTEE.

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WILL MEET IN MONTREAL.

THE January meeting of the Executive Council of the Canadian Manufacturers' Association will be held in Montreal. This innovation will undoubtedly commend itself to all members. Hitherto these meetings have been held in Toronto and they have been uniformly well attended by representatives from Montreal, Quebec and the East. It has been felt that a meeting at Montreal would not only be a courtesy to the Montreal Branch, whose zeal in the Association work has ever been keen, but would also permit of the attendance of many members whose distance from Toronto prevents them taking the active part in the work of the Association which they would otherwise gladly take.

Ontario members of the Executive Council should make every effort to attend the Montreal meeting. It will take place as usual on the third Thursday of the month. The work of the Association, if it is to accomplish the maximum of good, must be the result of a combined effort on the part of all members. A good attendance from Ontario will ensure a large and representative meeting.

AN UNSCIENTIFIC TARIFF.

WILL it be called the "Tariff of 1906" or the "Tariff of 1907?" The budget was brought down in 1906 and of course the new tariff went into effect at once, but the Minister of Finance promised to remedy any injustices in it and if his promise is carried out it will be so radically amended when Parliament meets early in the new year that the tariff finally adopted will bear very little resemblance to the one introduced in November, 1906.

Of the tariff as it now stands it must be said that it is the very reverse of what Sir Wilfrid Laurier promised it would be—a scientific tariff. It seems to be based on no general principles, and a remarkable lack of knowledge of the conditions in some of the leading industries is shown. Indeed it looks very much as if Mr. Fielding and his colleagues, growing weary of reading over the evidence taken before the Tariff Commission, had thrown it all into the waste paper basket, and taking a pencil, had simply run through the old tariff of 1897 and, without any consideration whatever, marked some items up and others down.

There are small increases on the duties on most lines of manufactured articles imported under the general tariff, and in many cases these increases, small as they are, will be advantageous to home manufacturers, but in some cases the increased duties on materials not produced in the country more than offset the increased protection given to the home manufacturer. We may hope that such injustices as these may be rectified.

The most glaring injustice in the new tariff is the application of the drawback system to certain materials used in the manufacture of articles for home consumption. This provision of the tariff strikes a severe blow at some of our Canadian iron and steel industries. The Dominion Iron and Steel Company and the company of the "Soo" will not be seriously affected by it, as they manufacture into finished products nearly all the iron and steel they produce, but if this provision of the tariff is not abolished it will be nothing less than a calamity to those iron and steel companies which are manufacturing materials for use by other manufacturers. It is intended, no doubt, to compensate the manufacturers of agricultural implements for the reduction of the tariff on their products by giving them free materials, but if it has the effect of crushing out of existence the Canadian iron and steel works which manufacture these materials or even of preventing their development it will do the agricultural implement manufacturers more harm than good, for they will be at the mercy of foreign manufacturers in time of scarcity. It may be remembered that the

United States Steel Trust a few years ago took Canadian consumers of steel rods by the throat and refused to supply them with any material unless they made a long contract to buy all their supplies from the Trust. Contracts were made in a number of cases on these terms, because the Canadian consumers could not immediately obtain sufficient supplies from England. Steel rods were on the free list at the time of this bulldozing. The same thing may happen as regards any other manufactured material for which Canadians are entirely dependent upon the foreign market. If Canada is to be commercially independent it must build up great iron and steel industries.

There is probably little danger of the immediate application of the intermediate tariff, but it is dangerous to give any Government power to apply such a tariff without consulting Parliament.

In conclusion it may be said that the new tariff was a great disappointment to manufacturers in general, because from statements made by members of the Government it was believed that whatever the intermediate and preferential tariffs might be, the tariff on the products of countries having high tariffs against Canadian products would be on a decidedly higher scale.

The policy advocated by the Canadian Manufacturers' Association was designed to secure the development of Canadian resources. It was expressed in the Halifax platform as follows:

"Resolved, That in the opinion of this Association, the changed conditions, which now obtain in Canada, demand the immediate and thorough revision of the tariff upon lines which will more effectually transfer to the workshops of our Dominion the manufacture of many of the goods which we now import from other countries.

"That, in any such revision the interests of all sections of the community, whether of agriculture, mining or fishing or manufacturing, should be fully considered, with a view not only to the preservation, but to the further development of all these great natural industries."

A number of American manufacturers have established branches in Canada during the last four years because they fully expected that the Canadian tariff would be substantially increased. If the policy advocated by the Canadian Manufacturers Association had been adopted many other American industrial concerns would have established branch factories in Canada. Moreover a large number of Canadian manufacturers had planned to extend their plants as soon as the tariff was revised. It is no exaggeration to say that if the tariff had been revised along the lines proposed in the Halifax platform of this Association many millions of dollars would have immediately been invested in Canada in extending the plants of old factories and in establishing new factories throughout the Dominion.

IMPROVEMENTS TO WATERWAY SYSTEM.

FROM all sides comes a demand for free national ports and increased harbor facilities. The Royal Commission on Transportation, of which Mr. Robert Reford was chairman, in its report last year, spoke in no uncertain tones of the need for a big scheme for transportation improvement. There have been immense advances made in railroad construction during the past few years. During 1906 the railway companies of Canada have spent $62,000,000 in construction and equipment. 3,314 miles of new track have been laid. This signifies enormous and widespread internal development. It means thousands of miles of agricultural lands made accessible for cultivation, and many industrial centres provided with better shipping facilities.

All this but serves to throw into greater relief the deplorably inadequate facilities for hauling traffic when it reaches the sea-board. The foreign trade of Canada is growing at an enormous rate. Last year it totalled over $552,000,000. Ten years previous it was $239,025,360, or considerably less than half. During that time little has been done to better facilities, which were even then altogether insufficient. A few weeks ago Mr. F. B. Girdlestone, general manager of the Bristol Docks, England, before a meeting of Canadian business men criticised most caustically the "incredible apathy" which existed in regard to the St. Lawrence route and the harbors of Quebec and Montreal.

At present a large amount of our business which should be done by the St. Lawrence route is diverted to Portland, Boston, and New York. This means a great loss to Canada. It means that we are building up the ports of the United States at our own expense, increasing their shipping, paying their laborers, and strengthening their banks. This is an important, though by no means the most important, aspect of the question.

The real question is how to make the transportation of Canadian products most economical and swift. Our future as a great exporting nation is assured. Great as is our foreign trade now, it is as nothing compared with what we may fairly hope for in the future. To handle this we must have greatly improved facilities for water transportation. There is no excuse for further delay. The Royal Commission has brought in a comprehensive report. We have the opinion of foreign authorities. We have the feeling of the people at large. It is not one port nor one route which needs improvement, it is our whole system. The Board of Trade of Vancouver have within the past few weeks memorialised the Government in favor of a free port. Montreal, Quebec, and the sea-ports in the Maritime Provinces are alike insistant. It is time for action.

RESTRICT EXPORT OF PULPWOOD.

TO get the most out of our natural resources it is necessary to carry on as far as possible the refining and manufacturing of our products. Some years ago the magnificent pine woods of Ontario were cut with reckless prodigality and the giant timber was floated down the rivers and rafted across the lakes to the sawmills of Michigan, which screeched with industry for twenty-four hours in the day. In this process the advantage to Canada consisted in the wages to the woodmen and the comparatively small government dues. To the United States went the cost of the mills, the wages of many men engaged in the more skilled labor of finishing the lumber, the cost of freight, selling the lumber, etc. In other words Canada got the husk; the United States got the kernel.

Then the Ontario Government put on an export duty, rendering the export of logs impossible. The instant result was the closing up of saw mills on the rivers of Michigan and the transference of the plants to Ontario. Now the Province gets all the revenue accruing from every stage of the manufacture. This is an example of a successful protective policy.

Another industry where a similar result could be secured is that of pulpwood. Canada has at the present time very extensive, though by no means inexhaustible, pulpwood forests. There are two chief ways of utilizing these resources: One is to cut the timber and sell it to the pulp and paper makers of the United States. The other is to cut the timber and have

it manufactured into pulp and paper in Canada. The returns to Canada from one cord of pulpwood cut from private lands and shipped to the United States are as follows:—

Average price per cord delivered at railroad.....	$3 50
Loading on cars	30
Freight to average United States boundary line, (5c. per 100 lbs.)	2 15
	$5 95

When it is cut from Government lands the returns are as follows:—

Stumpage paid Government	65
Contract for making and placing on river bank...	2 10
Driving, sorting, boom, and slide dues, etc.	1 00
Cutting, preparing and loading for shipment	60
Freight to average United States boundary line...	2 15
Interest on wood-preparing plant, ($75,000 at 6 per cent.; capacity, 24,000 cords, 6 months).....	20
	$6 70

Compared with this is the actual expenditure in Canada when the cord of pulpwood is manufactured into paper .

Interest on capitalization of plant	$4 84
Average cost to manufacture, 1 ton newspaper...	28 00
Average freights	4 54
Revenue from ton of paper	$37 38

As one ton of paper consumes 1¼ cords of wood, the revenue per cord is $29.88.

The comparison is striking. In the one case Canada benefits to the extent of between $5.95 and $6.70 per cord. In the other she benefits to the extent of $29.88. It is that additional $23.18 per cord which Canada ought to add to her wealth.

Conservation of our natural resources is an economic necessity which will be readily admitted. It is customary for a young country to grasp at present wealth without considering at what cost that wealth is procured. So in the case of pulp-wood some owners of timber are ready to ship it across the border to United States mills, without giving a thought to the greater advantage it would be to have the wood manufactured into paper in their own country.

The important point to be considered is that Canada is gradually acquiring a practical monopoly in pulp-wood. If the paper mills of the United States had to draw on their own supplies exclusively, the available pulp-wood of that country would be consumed in a very few years. Hence the wood of Canada is essential to the paper trade of this continent. There is the same scarcity of timber in the older countries of Europe. In fact the export trade is the most important part of the business in Canada and the United States. It is the greatest folly then for this country to let this rich resource pass from it. The cases of pine timber and pulp-wood are perfectly analagous. We know the effect of an export duty on the former in Ontario. How can the result be different if the same course be pursued with pulp-wood? The removal of United States plants to Canada, the employment of a large number of men, additional work for the railroads, increased markets, all these would come. It is to be hoped the Dominion Government will at this session of Parliament take steps to preserve for Canada this great forest wealth.

FIRE INSURANCE AND THE PUBLIC.

IN another part of this issue we print extensive extracts from a paper by Mr. Paul Von Szeliski recently read before the Insurance Institute of Toronto on this subject. The address on the whole is a thoughtful and fair presentation, from the Company's and the agent's point of view, of the insurance situation, and in selecting certain portions of it for publication we have endeavored to quote such parts of it as more largely interest the readers of this paper. It is well that the other side should not be lost sight of.

The main points of Mr. Szeliski's paper may be briefly summarized thus:

1. Fire Insurance Companies have suffered serious disasters which have depleted their treasuries.
2. "Most of the large American and Canadian Cities" are so seriously exposed to conflagration hazard as to cause great uneasiness.
3. The remedy for removing the burdensome insurance tax must be applied by the citizens generally in the adoption of loss-preventing methods.
4. A plea for the Insurance Agent (with a summary of his qualifications) and the desire for the co-operation of the press in moulding public opinion on the burning question of the day.

We do not think there can be any question as to the correctness of the position stated in the first proposition, although there is room for two opinions as to whether the disasters are solely attributable to unforeseen circumstances, or conditions that might not have been safeguarded. This, however, involves too long a discussion at this time. We do not, however think there is room for disputing the statement that the disasters have not been due to losses sustained on the business of the manufactures of the country.

Nor can there be much doubt concerning the proposition contained in the second point summarized from Mr. Szeliski's paper. Apart from those cities in which the possibilities of conflagration hazard is quite apparent to the lay mind, the disasters in Baltimore and Toronto show that the unexpected may happen, whilst the expected may be long deferred. We do not quote San Francisco in the unexpected happenings, because the "American Committee of Twenty" referred to in the paper plainly recorded the possibility of such a thing occurring (it is true the immediate cause was not anticipated). Mr. Szeliski claims that this Committee is "gratuitously rendering valuable services to the United States"; perhaps so! But like other gratuitous advice it is most frequently disregarded. It would be interesting to know how many companies which received the "Committee of Twenty's" report on San Francisco profited by the warnings therein contained to reduce their aggregate liability, and also how many companies rather assumed that the remarkably low loss record of that city for many years past warranted the continuance of a huge gamble in the maintenance of fabulous sums at risk. Just how far the accumulation of large liabilities is responsible for disaster to companies in the insurance world might well engage the attention of Mr. Szeliski and others in authority.

The third proposition offers Mr. Szeliski's remedy for burdensome insurance taxation, and theoretically there is much in it that will find hearty endorsement. A campaign of education to apply this remedy for the security it affords to the people in the prevention of fires is, however, more commendable than for the alleged object of reduction in rates. It is greatly to be feared that the Underwriters have not yet risen to a full appreciation of their responsibilities when loss preventing methods are adopted.

And finally we are in accord with the last proposition that the press may be and should be leaders in pressing for the adoption of modern fire fighting, and fire preventing methods. The Canadian Manufacturers' Association is squarely on record on this line, but the offer of our co-operation was not met by the companies in the manner that was naturally expected. It is because we firmly believe in a campaign of education that we are glad to find space for a large part of Mr. Szeliski's paper.

A FREE TRADE FARMER'S VIEWS.

AN interesting statement is made by James A. Glen, of Glanworth, a prominent free trade farmer, who writes to one of the newspapers complaining that the reduction in the duty on agricultural implements in the new Fielding tariff is too small. Mr. Glen says: "The party organs claim that the Government have cut the tariff on implements in half, but if we did not hear of it through the press we would not be able to discover it when purchasing, as they are just as expensive now as fifteen years ago."

There is no doubt that the tariff on agricultural implements has been cut in half during the last thirteen years. Hon. George H. Foster started the reduction in 1894, when he reduced the tariff on implements from 35 to 20 per cent. Mr. Fielding has made a further reduction; and Mr. Glen is perfectly right in declaring that the farmers would not know anything about either reduction if they were not informed by the newspapers, as they pay just as much for their implements as they did before the tariff was reduced. It is evident, therefore, that tariff reduction does not benefit the farmers. Low tariff does not mean low prices. As a matter of fact the prices of agricultural implements are actually higher to-day under a 17 per cent. tariff than they were thirteen years ago under a thirty-five per cent. tariff. On the other hand there is no doubt that the prices of agricultural implements steadily declined under the high tariff which was maintained from 1879 to 1894. In 1878, the year before the adoption of the National Policy of protection, binders were sold retail in Ontario at from $275 to $300. In 1893, under a thirty-five per cent tariff, the retail price of binders was $115 to $125 according to terms of payment. In 1878, single reapers were retailed in Ontario at from $100 to $105; in 1893 the price was from $60 to $65. In 1878 Ontario farmers paid from $65 to $70 for mowers, in 1893 from $47 to $50. Hay rakes cost the farmers from $28 to $30 in 1878; in 1893 from $25 to $27. In 1894, as already stated, the tariff on agricultural implements was reduced by Hon. George E. Foster from thirty-five per cent. to twenty per cent. According to the stock arguments of free traders this reduction should have saved the farmers of Canada millions of dollars during the last thirteen years, but we have the testimony of Mr. James A. Glen that it did not save them one cent as they have had to pay just as much for their implements since the reduction was made as they did before. In calling the attention of his fellow farmers to the fact that reduction in the tariff on agricultural implements have not caused any reductions in prices Mr. Glen has unintentionally knocked out the foundation of free trade price theories.

DEVELOP WEST INDIAN TRADE.

FOR the purpose of stimulating trade with the West Indies, the Pickford and Black Steamship Company have invited representatives of the Montreal, Toronto, Halifax and St. John Boards of Trade to take a trip through the islands and to Demerara, free of charge. The offer has been accepted and the delegates will leave on February 15th. by the P. & B. steamship "Olenda."

In order that the trip may be of as much value to Canadian merchants and manufacturers as possible the Halifax Board of Trade is arranging for a systematic investigation of the situation. The Secretary invites enquiries from all who are desirous of extending trade with the West Indies. All such enquiries will receive careful attention and information will be tabulated and published later.

This is a chance of which Canadian manufacturers should be quick to avail themselves. In most cases it is impracticable to go over the ground personally. Yet trade is impossible without a thorough knowledge of the needs and conditions of the other party. The present investigations will be made by men of high business standing. Those who are at all interested in this trade are invited to submit any questions which they may want answered to the Secretary of the Halifax Board of Trade. They will receive the closest attention.

EDITORIAL NOTES.

A resolution on Industrial Education will be introduced at the present session of Parliament. It is supported by all classes of the public, and should meet with no opposition.

Following Dominion Forester Stewart's announcement of a few weeks ago that he had traversed one thousand miles of land suitable for wheat growing, in the valley of the Mackenzie River, Prof. John Macoun now expresses the opinion that wheat can be grown to within three miles of Hudson's Bay. He explains that a compensating decrease in altitude accounts for the area capable of wheat production extending so far north. Each day brings some new revelation of national wealth. The frozen north is rapidly losing its terror.

General approval will be given to the Dominion Government measure providing for the inspection of canned food-products, meats and fish. A complete and thorough inspection during all processes of manufacture will be given. It will then be practicable to give a government guarantee for every can of Canadian produce. Penalties will be provided for false labelling, and power will be given to close all factories in which proper sanitary and hygienic conditions do not prevail. This should place Canadian canned goods in an exceptionally good position in foreign markets.

A wide-spread movement is under way for the betterment of civic administration in this country. In Winnipeg a strong business man was recently elected mayor through the active work of the combined commercial organizations of the city. In other municipalities, too, an effort is being made to overcome the prejudices of busy men against standing for public office. Yet unless the best men take in hand a city's administration, the whole citizen body will suffer from inefficient government. A healthy public spirit is needed so that when good men offer themselves as candidates, they will not be defeated by self-seeking demagogues. It is gratifying to know that the Board of Trade of Hamilton have undertaken the work of civic improvement, and have induced a number of representative citizens to accept nomination under their auspices.

CANADA'S RELATIONS WITH THE UNITED STATES

By Hon. JAMES McMULLEN.

WE have had relations with the United States for many years; we had at one time a treaty that was brought into force in 1854 and lasted till 1866. Under that treaty, Canada enjoyed a fair share of prosperity and a fair measure of trade with the United States. At the close of their war, they came to the conclusion that Canada had reaped too great advantages under the operations of that treaty and they abrogated it at the earliest possible moment. After that, and from that time down to the present, we have had legislation, first under the McKinley bill and second, under the Dingley bill, that tended to restrict and limit the exportation of all kinds of commodities, whether products, or manufactures, to the United States. We have been able to do a very limited business with them since that time. Under the Cleveland Government there was a little modification, but immediately afterward, when the Republican party returned to power, the Dingley bill was passed and the result has been that very great restrictions have been imposed upon Canada in the way of sending any of our commodities to the United States.



SENATOR MCMULLEN.

Seek British Trade.

Our Government, very fortunately, at the time of the passage of the Dingley bill, turned their face toward the British Isles. We have been doing a very large trade with them and it has increased. I have no doubt that when the Americans passed the Dingley bill they expected that Canada would come to Washington, and on bended knee, beg for better trade relations. The Government did not do so. They perfected our cold-storage system, whereby the perishable products of our country can be taken from the point where they are produced, sent across the Atlantic, and placed under the eye of the English consumer in as perfect a condition as when they left the factory. That, coupled with the fact that they sent commercial agents for the purpose of working up trade in Britain has resuted in a measure of prosperity that even the present Government did not anticipate.

Notwithstanding all the restrictions that have been placed upon us by our American people to the south, Canada has unquestionably prospered. The Americans must not come to the conclusion that Canada is a pauper at her back-door ready to accept any little concession that she may make us. In all the negotiations that have taken place between Canada and the United States from the close of the treaty in 1866 down to the present time, the American on every single occasion has stipulated that he should get a dollar's worth of advantage for ten cents in return. Canada has not been prepared to consent to any treaty of that kind. During the life of the McDonald Government, they made, I have no doubt, an honest and earnest effort to get better trade relations with the United States. They never succeeded.

During the present Government, Sir Wilfrid Laurier has stated that Canada has shown her face in Washington for the purpose of negotiating better trade relations for the last time. We all hope that this policy will continue. As I said, Canada has prospered and prospered well. We have made wonderful progress. We have a very great country, a country which I believe is capable of as great development in many lines as is the United States. The development is independent of them. We want to live in the most cordial relations with the United States, but we want them to distinctly understand that Canada will not sacrifice her rights and her interests as a Dominion in order to meet any demand they may make. We are a nation of ourselves; we are rapidly forging to the front as such, and we believe that our future will be great as long as we keep in close touch with the Empire of which we are a part.

Great Continental Prosperity.

No doubt the Americans are a great people. They have unquestionably developed to an enormous extent. We must not fancy in Canada that we alone are enjoying the present great wave of development and prosperity. Its influence has been felt over this whole northern continent. Take, for instance, the United States in the matter of manufacturing—in 1895 the United States sent manufactured products abroad, amounting to $187,000,000; in 1905 the exports of manufactured products of the United States was $543,000,000, or a million a day more than they were ten years ago. Take again the money in circulation in the United States; in 1887 the money in circulation in that country in the hands of her people was $1,867,000,000. The amount of money in circulation on the first of last month was $2,887,000.000. Fancy the enormous increase that she has made. While she has made this enormous increase in the matter of exportation and of manufactured products, and in the matter of circulation of money amongst her people, she has done it under the operation of a high protective tariff. Some people condemn protection, but we are bound to take notice of a nation that has made the marvellous progress that the United States have under its operations. They have some of the smartest, the cutest, the keenest, the most cunning statesmen that the world has ever produced, and we cannot do better in Canada than take a

*Address delivered before the Empire Club, Toronto.

lesson out of their book. Let us aim at a development along the lines that they have developed. Let us aim at keeping our trade largely for ourselves within the Empire. Let us take everything from England that we can get from her; let us adjust our tariffs so as to give England all the advantage that we possibly can give her, and if there is anything else to purchase outside of the Empire let us endeavor to purchase it from nations that will trade with us. The United States shipped to us last year, $152,000,000 worth of stuff; we sent them only some $70,000,000. Out of that $152,000,000, $70,000,000 was free. The $82,000,000 was dutiable goods. The $70,000,000 was composed largely of corn, of coal, of cotton; certain lines in leaf tobacco, etc., came in free. I may frankly admit that they need not thank us for taking those commodities from them. We cannot conveniently get them from any other place. But we have bought from the United States $82,000,000 worth of manufactured products. Now, let us carefully search the schedule of those products that we have taken, and if we can possibly adjust our tariff so as to give the Empire the advantage or to give any country that is willing to trade with us on equitable terms the advantage,—I say it is our duty as patriotic Canadians to do it

Diversity of Interests.

For my part, I frankly confess that we have a hard country to govern. We have different interests. Our North-West is developing very rapidly. I find that the people of the North-West want to get everything they require, the every-day requirements of life, at the lowest possible price. They do not care very much whether it is manufactured in the United States or whether it is manufactured in Canada or whether it is manufactured in England. We have spent enormous sums to open up the North-West. Canada stood by the Government in the development that has taken place in the construction of the Canadian Pacific Railway, and now in the construction of the Grand Trunk Pacific. We are spending enormous amounts of money and we have a right in return at least to have the advantage of the Western trade if we can comply with and fill their requirements on as reasonable terms as any other people. We earned that for the course that we have adopted, and we are entitled to it. I should like to educate the people of the West into a feeling that we should above all things cultivate an interprovincial trade, and let each section help the other

Lines of Development.

Now, if we are to develop at all as a country, we must develop along five lines: agriculture, manufacturing, lumbering, fishing, and mining. These must all go hand in hand and one must assist the other. There is no country on the face of the earth that ever came to be great and important unless it became a manufacturing country as well as an agricultural country. We must, of necessity, have our manufacturing institutions. We cannot do without them. I never was a believer in an excessive protective tariff, but I do want it so adjusted that our people will have a fair opportunity of succeeding.

The Distribution of Taxes.

The average tariff duty that is imposed upon the people of Canada is about $7 a head. It does not make very much difference to the ordinary individual whether that duty is collected off his boots or his hat or partly off both. If the linen in the bosom of your shirt that comes from the British Isles is put upon the free list, or the duty largely reduced and the duty collected thereon is added to the cloth that is in the body, as long as the shirt is sold at the old price what difference does it make to the wearer? Now that is the adjustment of the tariff that we want in Canada. We want to adjust it so as to give every producer in this country the advantage. Give him the inside track, and encourage in that way our home institutions. I regret that the present tariff has not gone as far in that direction as I would like to see it go. Still we have, as I intimated, a hard country to govern. I hope the Government may see new light on many lines, and I hope that they will come to realize that while there are many (such as members of farmers' organizations) disposed to find fault and complain of the tariff, and of the duties to which they are subjected, they ought to be patriotic enough to give to our home people the advantage under all circumstances, or the choice as between them and foreigners.

Our Taxes Are Low.

We live in a great Empire, the greatest the world has ever seen. There is no people on the face of the earth that enjoy more liberties than we do in Canada. We are the lowest taxed people in the civilized world. We make all our own laws. We administer our own laws. Nobody interferes with us. Consider how little we pay for defence, military and naval, compared with other countries. In the British Isles, the individual pays about $8.70 a head of taxes for army and navy. The French pay about $7.80; Germany about $6.65; Russia, before the war, paid $4.46; the Americans to the south of us pay $2.35, and it is increasing very rapidly; while Canada only pays 60 cents a head. I do admit this—we are greatly indebted to England. Every man goes to sleep at night with a feeling that he is absolutely secure and safe. We realize that we belong to a great Empire, that no country on earth would dare to lay a finger upon us, and while we enjoy all that, we contribute very little to the powerful defence that England owns, and that we believe would come to our relief at any moment. I should like very much to see Canada contribute something towards the British Navy. I think it right that we should do so. No doubt they have a very powerful navy, but I think Canada should, by respectable donation each year, show her willingness to contribute to the support of that navy, until such time as we commence to get the nucleus of a navy for ourselves; and I hope that will be a very long time. As long as we enjoy all the privileges that we do enjoy at this moment, we would be fools to alter our relations, because we cannot be happier, more contented or have greater privileges than we have at present.

An Apt Illustration.

Some time ago I was down in Kansas City and I was talking to an intellignt American gentleman, and he said: "You are from Canada?" "Yes." "Well, I am very glad to see you. Glad to have a little conversation with regard to Canada. Don't you think it would be better for your people to join us rather than to be paying taxes to England?" I said, "We don't pay any taxes to England." "What, no taxes to England!" "No." "Neither for army nor navy nor anything else?" "No! we pay no taxes to England; all we do is to pay the salary of a Governor-General and the equipmnt of his mansion, which costs us about $110,000 a year. That is all it costs us; we pay no taxes." In a very rough, gruff way he said to me, "What the hell good are you to England?" He thought that tax-paying was the only possible good that we could render to the Empire. Now under those circumstances, I think that we ought to be a very happy and a very contented people. I notice that Jim Hill was up in the North-West some time ago and made a speech at Winnipeg, in which he talked very strongly in favor of better trade relations with the United States. He said that

he should like to see the Americans take down the bars and promote better trade between Canada and the United States. Well, Hill has thirteen good sound reasons why he should talk in that way. He is building no less than thirteen branches from his main line into the Canadian North-West. For my part, I regret that they are being built. The farmers of that section think it is going to be a grand thing for them. I question in the end if it won't be an injury rather than an advantage. How will that be? Hill will take the wheat of Manitoba and the North-West; he will carry it down on his own line; it will be ground into flour; and it will be shipped to the Orient as the product of Manitoba wheat, after it has been mixed with the inferior wheat that they grow south of us. Even if the farmer gets a little better price to start with, he will get much less in the end when he has to compete with a product of that kind in the Eastern market. Now, I think, it would have been better if we had kept Hill out of the North-West, and I must say that, in my simplicity, I voted and fought against every one of those measures, because I thought that after building the Canadian Pacific Railway, and the Grand Trunk Railway, we ought to be able to handle, within our own territory, our own trade.

We Must Refine Our Own Minerals.

Last year, no less than $28,000,000 worth of raw mineral was sent from Canada into the United States. I hope that the day is not far distant when we will have smelters and refiners in our own country to handle all these mineral products.

These are the different points that I intended to refer to; allow me to say in closing that I sincerely hope that the meeting which is to take place in April next, "The Colonial Conference," will bring about a better condition of things within the Empire than we have at the present moment. It is most desirable, in my humble opinion, in the interest of the British Isles themselves, as well as in the interest of their colonies, that they should come closer together on trade lines. I believe the future of the Empire largely depends upon that. I am sorry to have to admit that, in my opinion, England has been getting a little behind the time. Germany appears to have forged ahead.

Advance of Technical Knowledge.

It is amazing to what extent technical knowledge is applied in Germany and in the United States. They are making wonderful progress; they are strikingly ingenious. They produce many things that we must have. The great trouble with England is to get them to understand the trade of the colonies and to make goods that will suit us. It has been hard to convince them to alter their plans, and I hope the conference will result in some change for the better. If it does it will be of great advantage not only to the Empire, but to Canada. We are proud of the development that we are making along many lines. Just allow me to touch upon one. In our hog products in Canada, we are getting into a serious condition, so far as the American is concerned. I saw a circular that was issued some time ago by the Armour people of Kansas City, and it was sent out to every farmer in the South-Western States, and what did it say? It said, "Unless the farmers of the South-Western States will produce for us a hog that is fed on more vegetables and less corn, so that we can produce a bacon that will meet the English taste equal to that of Canada, Canada will cut us out of the English market. They are beginning to take the lead, and we will eventually lose the English trade." That was the acknowledgment of one of the largest meat-curing firms of the United States. They don't want to trade with us, but we meet them in the foreign market. I hope that the day is not very far distant when England will come to her senses, and adopt the Chamberlain policy. I am confident it would be the grandest thing, possible for Canada, and the grandest thing for the Empire. She is fond of free trade. I must confess, looking at the history of France and Germany and the United States, it has been a marvel to me how England has managed to live through sixty years of free trade with all the hostility that she has had from the other nations of the world. I think it is singular. But if she will draw her colonies closer to her, under the system outlined by Chamberlain; bring us into such a close relationship that we will trade with each other on better terms than we trade with the outside world, I think it will be the greatest thing for the Empire and a blessing to the British Isles themselves. They have not realized the advantages that they are going to enjoy under such a system, and they will come to regret that they did not adopt it years and years ago.

Direct Line to Mexico.

Steamship connection between Canada and Mexico on the Pacific is now assured. Early in March the first boat of the Canadian-Mexican line will make the trip. The company is receiving a bonus of $50,000 yearly from each of the Governments and undertakes on its part to supply a monthly service, with steamers of not less than 3,000 tons. The Canadian agent of the line now states that already there is sufficient freight offering to justify the belief that steamers of 7,000 tons will be run. For instance, the company will carry 17,000,000 railroad ties, which are being cut by the Fraser River saw mill at Mill Bay. Many enquiries have come in from Eastern manufacturers and British Columbia merchants regarding the possibilities for trade.

Cement to Cuba and Mexico.

A profitable business in cement is being developed between Mexico, Cuba, and Canada. The Sydney Cement Company have received orders for 2,400 barrels for the South. These will go forward in one shipment. This trade is one well worthy of cultivation. The great growth of the countries of Central and South America make the possibilities for marketing cement very promising.

Alcohol Denaturing Prizes.

By a French law passed a year ago, two prizes are instituted:—

One of 20,000 francs in favor of the person who shall discover an agent for denaturing alcohol more advantageous than the denaturing agent naturally known, and offering to the treasury every guarantee against fraud; another of 50,000 francs in favor of the person who shall discover a system permitting the utilization of alcohol for illumination, under the same conditions as petroleum. The Commission of Analytical Methods has drawn up the conditions to which competitors must conform in the case of the denaturation prize. In the case of the utilization of alcohol for lighting, full latitude is left to inventors, provided that, in conformity with the law, the system presented permits of the utilization of alcohol under the same conditions as petroleum. Inventors should address written descriptions of the systems or devices they propose to Monsieur de Chef du Service des Laboratories du Ministère des Finances, 11, Rue de la Douane, Paris.

Industrial Betterment in Canadian Factories.

Improved Conditions make Factory Life more Pleasant.

ALONG with the rapid growth and material progress of Canadian manufacturing industries in recent years, it is interesting to note a steady improvement in the conditions surrounding the workmen and workwomen in many of the factories.

While laws have been drafted to protect the artizan when at work, the Provincial authorities have endeavored to see that factories are strongly built and properly equipped with fire escapes and other appliances for the safeguarding of human life, the Canadian manufacturer in many cases has not been content to fulfil simply his legal duty by making his establishment free from danger, but has sought to



Lunch Room at the Montreal Plant of
The Sherwin Williams Company.

render the conditions surrounding the employees in their daily work as favorable as could be reasonably desired.

The cost of carrying out these improvement schemes has often been considerable, yet many a manufacturer has found that care for the physical, intellectual and moral welfare of his employees has a direct return in increased output and better work. Even when applied on very advanced lines it has resulted profitably to the factory owner.

One of the primary things in such a system is order and cleanliness. Cleanliness must extend not only to the workrooms and machinery but to the employees as well. In order to accomplish this large washrooms with lavatories and shower baths are to be found in the factory and a plentiful supply of clean towels provided daily.

Lunch Rooms.

A growing feature in Canadian Industrial life is the providing of well cooked midday meals at the factory. It may be truly said that the days of the old fashioned dinner pail are indeed numbered as far as the large factory is concerned. In some Canadian factories a portion of the top floor is set apart as a Lunch Room and kitchen, and here a well cooked meal is served by competent waitresses at practically cost price. Who could object to sitting down to a bill of fare like the following one supplied by one of our large factories?

English Beef Broth.
Roast Veal Stuffed.
Bread and Butter. Rolls. Crackers.
Coffee. Tea. Milk.
Fruit Salad. Cream Puffs.
Oranges. Pie. Bananas.

In some cases a nominal charge—say 15 cents—is made for the meal; in others each item is charged on the "a la carte" system. The system is frequently worked out to cover merely the cost incurred by the firm, occasionally the meal is served at a price below cost. In such cases it is not looked upon as philanthropy, but rather as practical economy, for a well cooked meal generally produces physical improvement and a greater working capacity on the part of the employee. The establishment of a lunch system in connection with their establishments has almost become a necessity in factories located in the suburbs of a large city. Another interesting feature of the factory lunch room is that it serves as a common meeting place for the employees of widely separated departments, who thereby become better acquainted with one another and the different branches of the industry.

Club Rooms and Rest Rooms.

Comfortable rooms are often fitted up for the men employees of the firm, where the recess between lunch and the return to work can be spent in conversation, games or in reading current periodicals. Where women are employed, special rooms are often provided for their comfort.

Annual Outing.

The annual outing for the employees is pretty general in Canadian factories. It may mean the hiring of a special train or excursion steamer and a trip to some recreation



A Corner in One of the Men's Club Rooms, Montreal Plant of
The Sherwin Williams Company.

spot where games can be held, but it is one of the most democratic events of the year.

The various methods of industrial betterment now in vogue in Canadian factories are too numerous to be considered in detail, but a few may be mentioned in a general way. Mutual Benefit Societies to aid employees in cases of sickness, disability or death are often to be found and work satisfactorily. Monthly magazines are sometimes carried on to aid in advertising and to encourage the employees to learn more about the theoretical side of their work. Christmas remembrances occur in the form of a stuffed turkey and a quart of canberries to each family represented in the establishment. Some manufacturers, to encourage the spirit of long and loyal service make a rule of presenting a honorarium of value to every employee who serves twenty-five years in his factory.

A CONSTRUCTIVE SOCIAL PROGRAMME.

Professor Wyckoff, of Cornell, Before the Canadian Club, Toronto.

EVERYONE will agree with Professor Wyckoff when he maintains that in government affairs individualism as a school of thought is dead. Private interests are not necessarily in harmony with social interests, and a thorough-going hands-off policy is impossible.

As his second leading point the Professor urged that measures of reform must be proposed not from the standpoint of any particular interest or class, but in the light of their effect on society as a whole. Community of social interests demands this; for society itself confers benefits on all. It is a dividend payer. The single taxer says it raises land values. It does more; it gives an unearned increment to every income in the form of public services and a multitude of economic advantages. This social dividend must be divided; and in return for his share each citizen should contribute just and adequate services.

Professor Wyckoff's address is the more worth considering just now when a change in the basis of values has greatly disturbed society. The almighty dollar has shrunk. Increased costs have made trade and industry perplexing; have brought gain to some, losses to others. Of all our classes the best off relatively are probably the landlord class and the farmer; wost off those dependent on fixed incomes. These last know the pinch of prosperity. Wage earners, generally speaking, would seem to have enjoyed a fair share of the good times. Some closely organized unions such as plumbing, printing, and certain of the structural trades appear, indeed, to have been able to force a relatively disproportionate share and have aroused toward themselves within the ranks of other trades a feeling of latent irritation

But whatever be the exact situation it is clear that all classes grouped according to occupation are on the alert, and have been reconsidering their relations to society. For the time being class feeling is running pretty high; is more conscious and sensitive; more subject to manipulation by the political organizer, or the self-seeking reformer. Until a new level of values is gained and with it another period of quiescence society will doubtless be in a state of flux.

With us class reconciliation applies particularly to relations between capital and labor. Especially at the present time a constructive social programme would seem to demand generous and patient effort in this direction. If business men immerse themselves in their own affairs to the neglect of their employees' susceptibilities and aspirations, we may expect organized labor to take the bit in its mouth. Its leaders are the more likely to include in their platforms such impossible demands as an elective judiciary, and legislative recognition of the union label; and differences will run the risk of settling into enmities. Such possibilities are always at hand at every great economic change. If business men lay themselves open to them little wonder that strange propaganda have their day, and that governments falter between rival lobbies. The present certainly needs a constructive, helpful and healing social programme. Our universities, if they adopt a sympathetic and patient attitude might find a fruitful field here. But whether our university friends take part or not, one may be very sure that as long as the several classes are looking out merely for themselves a constructive programme must remain largely a dead letter.

S. Morley Wickett.

A NEW METHOD OF RIVER TUNNELING.

The system of tunneling through the beds of rivers, estuaries, or other waterways, by digging a trench and constructing the tunnels therein, is to be utilized on a large scale in the important double-tube tunnel for carrying the tracks of the Michigan Central Railroad beneath the Detroit River, contracts for which have recently been let. We are indebted for the broad principle of tunneling by the trench method to Contractor McBean, who made use of it in building the double-tube tunnel of the New York Subway beneath the Harlem River.

In the system to be used at the Detroit River the trench is to be retained, but the tunnel is formed by sinking two lines of steel tubes and inclosing them in a single monolithic mass of concrete. The design is a modification of that proposed by Vice-President Wilgus, of the New York Central Railroad, the preliminary plans for which were described in a recent issue of this journal.

The Detroit River tunnel will be built in a trench which will be excavated by floating dredges, and will be wide enough to accommodate the two full-sized railway tunnel tubes lying side by side. Piles will be driven in the bottom of the trench, cut off at the proper height, and capped with transverse steel beams, upon which will rest the tubes. A layer of sand and gravel with the addition of cement, if necessary, will be laid on the bottom of the trench, filling the spaces between the tops of the piles and also the transverse beams, and being finished off flush with the tops of the beams.

Upon the steel beams and bed of gravel and concrete will be sunk two lines of tubing, built of ⅜-inch steel plate. The tubes will be built generally in lengths of 263 feet. At every 12 feet of their length they will be reinforced by plate-steel diaphragms, and they will be sunk to their places from scows or temporary platforms. The spacing of the lines of piles and of the exterior diaphragms of the tubes will rest upon the beams when the tubes are in place. The end of each tube will be provided with a sleeve which, as the tube is sunk, can slip over the end of the adjoining tube. By means of rubber gaskets the tubes can be bolted up, forming air-tight annular joints; and into these joints cement grout will be flowed from the scows or platforms at the surface of the water. The trench will then be filled in with concrete until the tubes are compeltely buried, the surface of the concrete being finished off at the low-water depth required by the War Department.

After the concrete is completed, the water will be pumped out of the tubes, leaving the complete tunnels permanently buried in the bed of the river. The system as thus described, has many features to recommend it, one of which is that it obviates the necessity for the use of the troublesome and risky pneumatic process as employed under the North and East Rivers of this city. Furthermore, it becomes possible to build a tunnel nearer to the bed of the river, thereby decreasing the grades on the approaches and reducing the cost of subsequent operation.—"Scientific American."

Production of Lead in Canada.

The production of lead for the year 1906 amounts to 26,000 tons. The two months' strike of miners had a bad effect, cutting down the output by 4,000 tons. The production for 1905 was 27,000 tons. The record is held by the year 1900 when the big total of 30,000 tons was reached. A bounty is paid on lead, not to exceed $500,000 a year. No bounty is now being earned, however, as it is only paid when the price of lead does not exceed £16. At present it is quoted on the London market at £19 10s. a ton.

THE CONFEDERATION OF NEWFOUNDLAND.

By Hon. ALFRED B. MORINE.

THE union of Newfoundland with Canada is a matter of prime importance to the (a) Empire; (b) Dominion; and (c) Colony. It is important commercially and politically, with regard to both internal and external relations.

To the Empire the consolidation of outlying sections brings a measure of internal peace and increase of strength, decreasing the number of governing bodies, and through increase of their importance lessening their parochial nature. Every minor political administration finds cause of quarrel with the central authority from time to time, and the smaller the weight of that administration may be in reality the readier it is apparently to take offence. Newfoundland, for instance, is quite as difficult for the British Government to control as Canada and Newfoundland combined would be. If the colony were part of the Dominion the British Government would probably feel more confidence than at present as to the diplomatic conduct of the relations with the United States concerning fisheries matters. That very confidence would give the Government of the Dominion a freer hand in the matter than the Island Government is now allowed, and in the result all British interests would be advantaged.

The Dominion in case of union would acquire a large portion of the import trade of Newfoundland now done by the United States of America, and a portion at least of the import trade of the colony from the Mother Country. Canadian capital would find lucrative investment in the great mineral wealth of the colony. A pending dispute as to the interior boundary line in Labrador could be settled by the terms of union and thereby the Dominion might consolidate her Eastern territories, which are as capable of great mineral wealth as the Yukon or Northern Ontario. Union would consolidate the magnificent fishery interests of British North America, allowing them to be administered with one aim instead of various conflicting policies. This would mean practically that the fish supply of half the whole round world would be controlled with one great object in view. Geographically, the island colony commands the St. Lawrence, and a foreign power in possession of the island could embargo the foreign trade of Canada over the Atlantic. Outside the Dominion politically, the colony is a menace potentially to the Dominion. Not of it, is to be against the Dominion, to a certain extent. In matters of policy, the colony is not infrequently against the Dominion, simply because its interests are not identical while the separation continues.

The Colony would profit by union, in a variety of ways. Many of its imports would be cheaper by the amount of duty now payable. Its manufacturers, who are influential though not numerous, fear this cheapening process. Its small farming community, now protected, fear competition. Its consumers should be convinced by the fears of the producers. Probably the local manufacturers would retain the local market, by the aid of local pull, and the farmers on the West Coast would actually gain a market in Cape Breton. Both manufacturers and farmers would profit by the greater general prosperity confederation would induce. The colony's exporting fish merchants oppose union, fearing competition but as a fact they have the competition of Halifax fish buyers now, and union would not increase it materially. Confederation would lead to the rapid improvement of the colony's lighthouse and steam mail and freight service with the Dominion and foreign countries. The fishery protection service would be improved. Generally, Canada's laws are more favorable to fishermen and fishery interests than the Colony's could possibly be. The broader life which the colony would take on, after union, through the widening of its interests, could not fail to benefit its intelligent people. The public rights which a people numerically small cannot enforce would assume importance when supported by the Dominion. An influx of capital for the development of the island's great mineral wealth would naturally follow the closer life which would exist after union between a now divided people.

REFORESTATION.

The people of Canada are gradually becoming seized of the necessity for preserving our forest resources. Speaking of recent legislation in New Brunswick, the St. John "Sun" says:—"In connection with the action of the New Brunswick Government for the protection and preservation of its forests it is instructive to note that so great has been the denudation of the New England watershed that the American Government has recently appropriated $3,000,000 to set aside to national forest reserves in this region. The bill provides for the setting apart of 800,000 acres from which flow the five principal rivers, namely, the Connecticut, the Merrimac, the Androscoggin, the Saco, and the Piscataqua, with their important tributaries and enormous water powers; and in the Appalachian Mountains, 4,000,000 acres situated at the headwaters of the James, the Roanoke, the Yadkin, the Catawba, the two Broads, the Saluda, and the Chatooga; the Cossa and Chattahoochee, and the Kanawha and the Tennessee—this watershed receiving the heaviest rainfall east of the Sierras.

A course similar to this was followed by the French Government in 1860, when it appropriated $15,000,000 to purchase 400,000 acres of the deforested area; it has incurred for over forty years an annual expenditure of $600,000 for reforestation, and it must yet acquire an additional tract at a cost of $20,000,000. Fortunately Canada has awakened to its danger before any such expensive process is necessary, and if the present agitation for forest preservation is followed by energetic action we may, without any great outlay, provide for the continuance, in perpetuity, of a lumber supply sufficient for all our demands."

New Boat for Lake Traffic.

A fine addition has been made to Canada's merchant marine in the Midland Prince, which was launched on December 5th from the Collingwood Shipbuilding Company's yards. The boat is being built for the Midland Navigation Company. She is the largest boat ever built in Canada, being 486 feet in length, 51 feet in width, and 31 feet in depth. She will carry a cargo of 10,000 tons on a draught of 20 feet. Her equipment is in keeping with her size and will consist of the most improved engines, steering gear, etc. The Midland Prince will ply between Port Arthur, Fort William, Duluth and Georgian Bay ports.

TRANSPORTATION.

DELAYS IN FREIGHT TRANSPORTATION.

A Great Annual Loss is Caused to Shippers Through the Insufficiency of Cars and Locomotives.

THIS is the season of the year when the inadequacy of the railway facilities to handle the traffic of the country is forcibly impressed upon the shipping public. Everywhere complaints are heard of the shortage of freight equipment of all kinds and of motive power. The old familiar reply of the railways that they should not be expected to provide equipment capable of taking care of all of the traffic offering at the busiest season of the year is also very much in evidence. This argument has done duty for many years, but is still as convincing to the railway man as of yore. He shuts his eyes to the fact, that the shortages are with us even under normal conditions, and seems to think because during two or three months when shipping is dull there are cars on hand for which loads are not available that this is sufficient excuse for keeping the equipment of the railway down to the lowest possible minimum. In other words that the minimum amount of traffic offering at any time during the year should be the gauge for the maximum of equipment of the railway.

What would happen if such a policy were adopted by manufacturing industries? In the commercial world business men must arrange their facilities so as to supply goods at the convenience of their customers both as to quantity and time, otherwise the orders will go to competitors. But the business of railway transportation must necessarily be of a more or less monopolistic nature. It is in this respect distinguished from other industrial enterprises. A manufacturing business must be conducted with an eye to its continued expansion. Facilities must be provided beyond what will take care of the trade under normal conditions and unless this is done there can be no progression.

Freight Continually Delayed.

The attitude of the railways seems to be that the traffic of the country should be regulated to suit their convenience. They should be permitted by inadequate facilities to hold back traffic offering during the busy seasons so that it will be available for them later on and the freight movement will be in a steady volume so as to enable them to reap the best possible results with a minimum of equipment. This plan is certainly a sure producer of dividends. Manufacturers and farmers located on a railway line undermanned and insufficiently equipped, where they have no other outlet, must perforce hold back their freight for the convenience of the carrying company. Under such conditions most men could operate railway enterprises with profit. What is needed in the railway service as in the commercial world is men who are able to devise means of earning dividends while affording proper facilities to handle all traffic when it offers, and at the time it should be handled. The railways should not be permitted to keep the products of the farm in the country until they are prepared to supply cars and take it out, forcing owners to suffer losses through fluctuation of markets; nor should they be in the position of keeping the products of the factory from the customers in the country through insufficient locomotive and freight car equipment. The Railway Act requires reasonable and proper facilities at all times of the year, and those who obtain charters from the Governto give returns upon their investments. Even the business of the agriculturist has to be arranged to suit the times and seasons. During a very large period of the year the implements ment for the operation of the public service of common carrier do so with a full knowledge of this fact. If they are not willing to abide by the requirements of the law they should not go into the business.

Analogous Conditions in Other Industries.

Vessel owners have only a limited period each year in which to operate and they must supply facilities to handle traffic at the convenience of the shipping trade or it is lost to them. Notwithstanding these limitations, however, the vessel-owners appear to be able to make sufficient revenue necessary in the operation of the farm are idle; they cannot be kept in operation for the purpose of making returns upon the capital invested in them. Machinery, such as reapers, binders, threshers, and the like, can be used for only four, five or six weeks during the whole year, yet they must be kept in readiness for that short season of work in order that the results of the harvest may be reaped.

There is nothing in this time-worn excuse of the railways that their facilities are capable of taking care of the traffic of the country if shipments are arranged so as to accommodate the railways. The business of the country cannot be expected to mark time in order to avoid the expenditure of money to provide proper transportation facilities by companies who are in duty bound to provide the same. Until the transportation companies are forced to wake up and carry out the obligations which rest upon them the producers of the country will be subjected to serious losses through inability to promptly reach markets and their competitors in the markets of the world will continue to have a great advantage.

THROUGH RATES OVER TWO LINES.

The Railway Act provides that railways whose lines join or intersect those of other railway companies shall provide facilities for the interchange of traffic together with reasonable through rates thereon. This fact, it would seem, is frequently overlooked by the traffic officials. It is a common practice for railways to join together in the establishment of through lines over large territories in order to form continuous transportation routes and provide through rates to facilitate the interchange of traffic between various sections of the country. When this is done voluntarily by interested railways through tariffs are provided which are based upon the whole distance traversed and the entire service involved and not upon the individual charges of two companies to and from the junction of the lines.

This kind of through-rating, however depends almost entirely upon the inclination of the carriers to enter into joint through rate agreements amongst themselves. There are many sections of the country in which these facilities are denied and traffic is required to pay the sum of the local rates to and from the junctions. For instance traffic originating on the line of the Grand Trunk in Ontario may be sent to Canadian Pacific stations west of Lake Superior under through tariffs based on the whole service involved. The same is true of traffic originating on the line of the Grand Trunk and destined to stations on the main line of the Canadian Pacific in Ontario east and west of North Bay, while

traffic interchanged between these two companies within the more populous districts of Ontario and Quebec between Windsor and Quebec City cannot be interchanged except by payment of the local charges to and from the junction.

Through Rates a Commercial Necessity.

Joint rates over connecting railways are not only a public convenience but they have now become a commercial necessity. Their establishment has enabled the products of all sections of the country to be offered for sale in common markets. The progress of communities and the prosperity of manufacturing industries are greatly influenced by fair or unfair railway service and railway rates over connecting lines. The absence of reasonable joint through rates unduly limits the free expansion of trade and commerce. Where a manufacturer or shipper without through rates is marketing his goods in competition with another who ships from a point where the through rate is available he is subject to undue prejudice. Shippers located in towns served exclusively by one railway who have to compete with those located on other railway lines over which the through rate facility is granted find the growth and development of their business seriously retarded.

Effect of Refusal.

The denial of reasonable through rates over two or more railway lines results in the development of competitive railway points to the detriment of the non-competitive points. Cases are not wanting where manufacturers have been forced to remove their plants from non-competitive to railway competitive centres in order to be in a position to secure through rates reasonably related to those enjoyed by competitive industries.

There are perhaps instances where through rates are required by shippers and manufacturers to points on connecting railway lines where the general interchange of traffic would not justify the railways in going to the expense of compiling and publishing joint schedules to cover all articles of merchandise, but this is no reason why one desiring to forward freight over two or more railway lines should be denied the facility of a reasonable through charge as required by the law. Where it is in their mutual interest to do so the carriers are able to devise ways and means to cover such cases, and the interests of the public should receive equal consideration.

Plan Where Traffic is Light.

A simple plan, where the traffic does not warrant the issue of through schedules, has been evolved by some of the Railway Commissioners in the United States. It consists of an arrangement under which in the absence of joint tariffs through rates to stations on connecting railways are made up by deducting 25 per cent. from the rate of the initial carrier to the junction and the connecting carrier is required to make a similar reduction from the junction to the destination. An objection to this plan is that it does not always result in a through rate properly related to the distance and service involved, but where the traffic is light this does not prove a grave hardship and for general practice this solution might be accepted. Exceptions, of course, will be found necessary where competitive conditions arise.

Railway Commission Must Act.

The conditions with respect to through rates to-day are practically no better than at the time of the passage of the Railway Act. A regulation should be provided by the Railway Commission that through traffic must be given the benefit of through rates. That the Commission has the power to provide such through rates is evidenced by orders which it has already issued in the case of rates on glass bottles from Wallaceburg on the Pere Marquette, to Toronto and Montreal on the Grand Trunk and Canadian Pacific Railways, and in the London interswitching case where through rates were provided for traffic to and from the Grand Trunk terminals in London and stations on the Canadian Pacific Railway.

THE REAL STATUS OF RAILWAYS.

The Supreme Court of Canada has issued its decision in the appeal of the Grand Trunk Railway against the order of the Railway Commission respecting interswitching at London. It will be remembered that the Commission ordered the interchange of traffic between the Canadian Pacific and Grand Trunk Railway companies at London. The Grand Trunk objected to the order, mainly on the ground that the Commission did not give them sufficient compensation. The Commission's order provided only for a reasonable charge for the switching service involved, whereas the Grand Trunk claimed they should be compensated for the loss of the traffic which would be diverted to the Canadian Pacific lines and that consideration should also be given to the fact that the Grand Trunk had extensive terminal facilities in London while the Canadian Pacific had not, and the latter line, therefore, would be securing advantages in the way of additional terminal accommodation. The Railway Commission excluded these considerations in making its order and the Supreme Court has now confirmed the action of the Commission.

The claim of the Grand Trunk Railway seems to be based upon the assumption that they are entitled by right to the haulage of all traffic originating at or destined to certain industries which have siding accommodation from their rails, and if the owners of such industries desire to make use of the facilities afforded by connection with competitive railway routes under the provisions of the Railway Act, the Grand Trunk Railway must be reimbursed for the diversion of the traffic from their line to the competitive route.

It is to be hoped that the decision in the London interswitching case will convince the railways that a shipper has the privilege of deciding for himself the route by which his traffic is to go and that it is the duty of the carriers to provide proper facilities by the joint routes designated, together with reasonable through rates. The object in granting railway charters is not for the benefit of the promoters thereof but for the public service and when the railway companies realize this fact the differences between shippers and railways will be in a fair way of adjustment.



The Only Remedy—Reciprocal Demmurrage.—From the *Black Diamond*.

EDUCATION OF WORKMEN IN TRADE SCHOOLS.

In the Winona Technical Institute a full course of instruction is given in various trades.

A NUMBER of national associations of the United States have taken a new tack in the development of efficient workmen by helping in the organization of trade schools in which it is expected the number of skilled workmen will not only be increased, but will help several of the industrial lines to a greater expansion of business and go a long way toward the solution of the apprenticeship difficulties which have for years confronted these business enterprises. Several of the national organizations have made substantial subscriptions to scholarship funds and have contributed liberally to the equipment of working plants and the trade schools are in operation at Winona Technical Institute, at Indianapolis, Indiana.

Establishment of Founders Schools

The National Founders Association, made up of practically all the large industrial organizations of the kind in the United States, has recently begun operations in its school at the Technical Institute, after several months of preparation. The foundrymen have had difficulty in obtaining efficient help. It was long ago decided that the apprenticeship system in the foundries was not developing enough skilled men. Another source of supply had to be secured. Hence the foundation of the Winona Technical Institute. From the school at Indianapolis it is expected that young men will not only be trained into capable workmen but will, when their schooling is over, be sufficiently advanced to take a foremanship in a commercial iron foundry.

LAST month the apprenticeship system in force in the Grand Trunk Railway shops was described in "Industrial Canada."

It showed how a steady supply of efficient workmen was provided by means of an instruction in the shops, combined with regular evening classes.

The work of Trade Schools is outlined in the present article. In both cases efficiency of service is sought. Every means of securing this must be considered.

The sum of $3,000 a year has been voted by the National Association for scholarships to encourage young men to take up the trade of moulding. The Association has named a committee to advise with the authorities of the Technical Institute in the operations of the school. A commission from the foundrymen's organization has been designated to aid the school in obtaining students. Equipment to the value of several thousand dollars has been given without cost to the school by manufacturers of foundry appliances who appreciate the difficulties of the labor question as it confronts the foundrymen of the country. A building costing $10,000, designed after ideas of some of the leading foundrymen of the United States, has been erected on Technical Institute grounds, and a number of young men from over the United States are now receiving practical instruction, working in metal and sand every day as if they were in a commercial plant.

The director of the school is Edward A. Johnson, who came from the workshops of the University of Minnesota, and he gives his whole attention to the training of the students in his department. The school undertakes to teach young moulders the best methods which prevail in the best foundries. The instruction is of the kind which prompts a student to exert his intelligence in order to discover the expedients for removing difficulties which occur in manual work. Six days in the week, arrayed in overalls, the students are at their work in a well-appointed building. The floor space is 58 by 120 feet, well lighted, and with adequate facilities for the quick removal of smoke and gases. The cupola is in another room, 22 by 30 feet, which prevents interruption of other work. A cupola of seven and another of three tons' capacity an hour, benches, flasks and all appliances necessary for modern foundry practice, including moulding machines, are at hand for the use of students.

Course of Work.

The instruction takes up the preparation and mixing of sand; making and baking cores; facings, their uses and preparations; bench moulding from ordinary patterns; match plate work; making sand and plaster follow boards; floor moulding, including the casting from patterns of complicated form; dry sand, loam and pit moulding; sweep work and green sand core making; cupola management in all of its details; cleaning and tumbling castings.

Supplemental instruction goes thoroughly into the elementary study of the laws of heat, combustion and gases; the physical and chemical qualities of moulding sands; the mechanical and chemical qualities of the different grades of pig-iron and their mixtures; methods of storing and checking patterns; estimates, prices and sources of materials. One of the features of the school is occasional excursions to commercial foundries in Indianapolis when students may obtain an idea of what is before them when they leave the school for the industrial world.

Assistance to Students.

The school for foundrymen in its scholarship plans follows the methods of other departments of the Technical Institute. The scholarship fund of $3,000 a year which the National Association has voted is divided into thirty scholarships of $100 each. If a young man desires to learn the trade of iron moulding and does not have the means with which to pay his tuition, which amounts to $100 a year, the money is lent to him from the scholarship fund. He gives a personal note as security for the loan. The note runs for ten years, does not bear interest, and the borrower is placed on his honor to repay the amount sometime within the ten years, when the $100 becomes available to some other young man who aspires to become a proficient iron moulder. In this way a $100 scholarship becomes perpetual and it will not be

many years until the national foundrymen will be able to take care of a large number of young men in the school. After the students have had their training at the Technical Institute, the employing foundrymen will take the young men into their plants and there give them steady and permanent employment. There is such an urgent need for iron moulders all over the United States that it is probable that the school will never be able to turn out young men as rapidly as the demand requires.

Other Trades Taught.

The National Lithographers' Association has a school at the Technical Institute, to which it gives $3,000 a year, and to which has been given a plant costing $15,000. The United Typothetae is supporting a school for printers at the Institute, which has a $30,000 plant and receives $2,000 a year



Graphic Art Building, Winona Technical Institute.

for scholarships. There is a school for carpenters, and another for electrical workers in full operation at the Technical Institute. The Tile Manufacturers' Credit Association of the ciation has equipped the school on an extensive scale and endowed thirty scholarships.

Nearly every state in the United States is represented in the different schools of the Winona Technical Institute. A number of young men from Canada have entered the different trades since the institution opened less than two years ago. From its beginning the institute has been unable to train young men as rapidly as employers demand, and if it had them ready 500 young men could to-day go into regular United States has for about two months had a training school for young men in operation at the Institute, in which is taught the setting of tile in floors, hearths and mantles. The Assoemployment with some of the largest industrial concerns of their country. A number of the master lithographers of the United States have sent their sons to the institute to be trained, the father thinking that the institution could give them more knowledge in a shorter time than the son could obtain in a lithographing plant.

Freedom of Attendance.

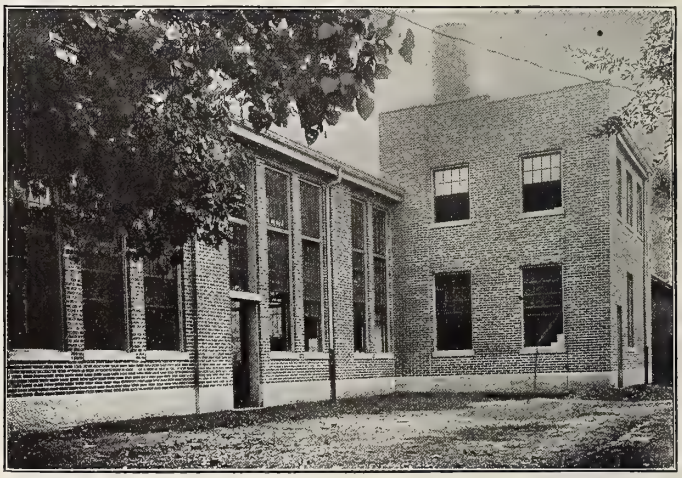
The wealth or poverty of the student does not enter into the question of entering one of the trade schools of the Winona Technical Institute. The only requirement is that a student shall have completed the eighth grade of instruction in the public schools. Common school branches are not taught in any of the departments of the Technical Institute. Every building contains a workshop of the most practical kind, and the entire effort of the instructors is directed to training the hands and minds of the young men along practical lines.

The Winona Technical Institute gives promise of growing into one of the great trade schools of the world. It is in physical condition for such a growth. The institution occupies an extensive property which forty years ago was acquired by the United States Government and from the close of the Civil War until 1903 was used as an arsenal. The property includes over 76 acres of ground, overgrown with stately forest trees. Only a small portion is occupied by buildings. When first taken up by the Government the tract of ground was well in the country from Indianapolis, but that city has now grown entirely around it, and by two street car lines the institute can be reached by a short ride from the heart of the city. The Government spent over $700,000 in erecting large and substantial buildings on the land, each one of which has been converted into a trade school with slight rearrangement of the interiors.

Organization of Trade Schools.

The people of Indianapolis bought the arsenal property of the Government at the low figure of $154,000. The money was raised by popular subscriptions, newsboys and clerks contributing their pennies to the general fund to which wealthier citizens subscribed hundreds and thousands of dollars. The people of the city purchased the property with the intention of converting it into a system of trade schools, and the property was turned into the hands of the Winona Assembly and School Association, which has the management of the Institute.

The Winona organization is made up of a large number of business and professional men who through philanthropic channels have set their means to work for the uplifting of their countrymen. Among the most active directors of the



School for Iron Moulders, Winona Technical Institute.

Winona organizations are:—H. J. Heinz, of Pittsburg; John M. Studebaker, wagon manufacturer, of South Bend, Ind.; Alexander McDonald, of the Standard Oil Company; a number of other millionaires are in the list, and bank presidents, heads of iron foundries and men representing many lines of business activity take lively interest in the operations of the institute. The President of the institute is Dr. Sol. C. Dickey, for many years a home mission worker in the Presbyterian Church.

A handsome illustrated calendar has been issued by the B Greening Co., Limited, of Hamilton. The design is similar to that of last year's, showing the portraits of the President and Incorporator of the present firm, the Founder of the business here, and the founder of the English company. A copy of this calendar will be sent to any reader of "Industrial Canada" who writes to the B. Greening Wire Co., stating the branch of business he is interested in.

FIRE INSURANCE AND THE PUBLIC.

The Problem of a Better Understanding.

Paper read before the Insurance Institute, on November 27th, 1906.

THIS paper, as its title indicates, is not of a technical nature, but rather a plain discussion of facts, figures and conditions of the fire insurance business, a better knowledge of which on the part of the public would benefit both the assured and the insurer.

The present seems an extremely opportune time to interest the public in this subject when both the underwriting profession and the public have been stirred by the magnitude of the San Francisco disaster, the lessons to be derived from which should have impressed themselves upon all in some proportion to the magnitude of the calamity.

The news from Chili, coming so shortly after that from San Francisco, reminded us, if such a reminder were necessary, that occurrences like those of Herculaneum and Pompeii and Lisbon, are quite as possible to-day as in any former age, while, unfortunately, all the advances made in science do not enable us to foresee a catastrophe of this nature.

One fact, however, stands clearly forth, that had fireproof structures, protected frod outside exposure, constituted the greater portion of San Francisco's buildings, the fire could not, in spite of the crippled state of the water works system, have reached the proportion it did.

And, further, not only will cities in countries known to be subject to seismic disturbances, have to make special provision for fire protection under conditions similar to those that appeared in San Francisco, but other cities as well should profit by this lesson, which, however, only enforces in an exceptional manner those taught by the extensive and serious conflagrations of Baltimore, Toronto, Ottawa, Hull and other places; one of the principal measures of precaution called for being to increase the number of their sources of water supply, as well as the number of independent mains therefrom, so that disabled sections can be cut without disabling the whole system.

A Matter of Public Interest.

It is the public, it is every citizen, who ought to be brought to a realization of the seriousness of the situation existing in most of the large American and Canadian cities, for how can we expect to see recommendations and plans brought forward by those interested in the subject, carried out, unless they are approved and supported by all thinking, broad-minded citizens, seeing that such projects necessarily involve the expenditure of large sums of money, the granting of which usually depends upon the vote of the taxpayer.

It is, unfortunately, true, regard being had to the inferior construction of buildings, due principally to lax municipal regulations and absence of supervision, that most American and Canadian cities must be considered as having inadequate water supply.

This inadequacy is due primarily to the enormous growth of our centres of population; water works systems designed upon a basis of a normal increase of population and industries, and limited in cost to an amount such as the citizens at the time could be induced to incur, soon become inadequate and practically useless for fire protection when urban growth proceeds at the rate frequently witnessed in recent years.

Lack of ample supply and proper distribution, insufficient pressure, as already stated, absence of separate fire main systems and gate valves, are amongst the most common defects of civic water-works systems.

The sky-scraper, the mammoth warehouse and departmental store and large manufacturing establishment must, partly in consequence of this frequent inadequacy of water supply, have special protection of their own.

Automatic sprinklers with automatic alarm attachments are, so far, the best protection from interior fires, as wire glass windows in metal frames are from exterior fires.

Preventive Measures Needed.

But apart from the loss by conflagrations, the fire waste in the United States and Canada from general causes is simply appalling, and in consequence the merchant's and manufacturer's insurance premium has become a more and more serious item in his expense account. The remedy, however, apparently does not lie in the formation of new insurance companies, either stock or mutual, or in the nostrum of placing insurance at (only apparently) lower rates in unlicensed, foreign and mostly irresponsible concerns. The real remedy lies in preventive and protective measures by the cities as well as by the individual property owners.

That the high fire rates prevailing in this country are not due to the rapacity of the insurance companies whose coffers, with few exceptions, have been sadly depleted, but simply and solely owing to the high loss ratio of the country, one glance at the following comparative table should convince even the most prejudiced.

From a special United States Consular report No. 28 insurance in foreign countries, published 1905, I take the following data:—

Comparison by cities—30 European cities gave for various periods (quinquennial only in a few instances) an average loss per capita of 61 cents, as against a five years average of 252 American cities of $3.10. Per capita loss in Canada, average last five years, $1.34, Toronto, last five years, over $9; last twenty years over $4.25.

Taking the number of fires to each one thousand population in the same cities the figures are 0.86 for the European cities, as against $4.05 for the American—which clearly demonstrates carelessness on the part of practically all classes.

Effect of Building Laws.

The reason for the advantage enjoyed by European as compared with American cities must be sought principally, as all reports tend to show, in their stringent building laws, the strict and carefully enforced regulations concerning the storing, handling and transportation of highly inflammable substances and explosives, as well as the safeguarding of all more or less hazardous manufacturing processes. The whole resulting in practical immunity, as is strictly speaking the case of the city of Berlin, from serious conflagrations.

In the absence of that greatly decried but beneficent paternalism of some European countries, our citizens must themselves take the initiative and "spend money to save money."

We should always remember that fire insurance is only a partial remedy. The essence of fire insurance is indemnity only, the well-established law of equity providing for payment simply of the value of the property destroyed. Even the most ingenious contract of the modern form of "profit" insurance cannot indemnify the manufacturer for the loss of business connections it may have taken him years to establish.

The remedy, therefore, must be applied by the citizens themselves by using "loss-prevention methods which produce buildings susceptible of only a minimum of damage from fire." These are the means which should be used to reduce the burden of high insurance premiums, and to render the business less hazardous, and consequently less unprofitable to the insuring companies.

Co-operation Necessary.

To attain that object requires the hearty co-operation of underwriters, civic representatives, architects, and above all, of property owners.

Especially in the conflagration-swept area of Toronto do we already see many buildings designed upon these lines. while much has been done in improving from this point of view old buildings of faulty construction. Needless to say, much remains to be done; fire walls ("cut-offs") can be introduced; openings between floors and between rooms can be protected, to prevent the spreading of fire; windows toward "exposing" buildings can be protected; suitable apparatus can be provided with which to extinguish a fire before it has time to assume large proportions. All such improvements merit allowances in the insurance rate—the allowances thus secured are dividends on the money spent in making improvements ,the same as in the case of a new building of fire-proof construction. Much of what has been achieved in this direction must be credited to the educative influence of intelligently devised rating schedules adopted in recent years, which in their application in practice will be more and more perfected, and, as is inevitable in this world of change, will, from time to time, have to be adjusted to changing conditions. However, to make these schedules less empirical, it is absolutely essential to profit by the example of our brethren in the life branch and the Western Union, and inaugurate a more complete and scientific system of statistics, national, in fact, international, in its scope, without which equitable and rational rate-making is difficult.

How rates are made and why co-operation amongst companies through underwriters' associations is essential to intelligent rate-making, and ultimately of benefit to the assured, is a subject little understood by the public, yet upon which time will not permit me to enter more fully.

Examination of Water Systems.

One phase of the usefulness of underwriters' associations I cannot abstain from briefly referring to, namely, their examination of water-works systems, and conflagration conditions in cities.

The American Committee of Twenty has rendered, and is still gratuitously rendering, valuable services to the United States, the cost of which might more properly fall on the taxpayer.

The public at large is naturally most interested in rates, and it is clear that the more the underlying principle of the schedules, such as the penalizing of defects and granting of allowances for commendable features, are recognized, accepted and acted upon by the public, the more fire insurance conditions will change for the better both for the public and for the insurance companies.

To ask for fixed fire insurance rates would, in the writer's opinion, be more unreasonable than to ask for a fixed bank discount rate. It would mean stagnation instead of progress.

But let us dwell for a few moments on another aspect of fire insurance. As almost no form of business activity is possible without credit, and credit in turn could not be given without the protection fire insurance affords in one form or another, be it to the banker, mortgagee, bond or shareholder, embracing, as its protection does, the wealth of the whole nation, its importance to the public cannot be overestimated. Its necessity, indeed, is obvious, and has been again and again urged upon the public by all associations of credit men.

In view of the enormous amounts at stake, it is not surprising that the insured has been urged, that "he should examine into the financial responsibility of all insurance companies to which he grants credit (and this is what he does when he takes a policy) just as he investigates before granting credit in the ordinary course of business. Co-operation towards that end by the agents would be advantageous both to assured and the companies.

The Work of Insuring.

Before closing, let me put in a good word, and one of commiseration for the agent or canvasser. He it is who continually comes in contact with the public; it is he who has to stand the brunt of dissatisfaction when rates are raised or demands for improvements made; it is to him the public will turn for answers to the innumerable questions continually arising (owing to differing conditions) in the erection of new or the alteration of old buildings, or in connection with the multifarious processes of manufacture. He is expected to be able to talk glibly on questions of insurance engineering and underwriting, debatable even amongst experts, and on which the dear public is ever ready to offer advice. He is asked to pass upon the merits or demerits of plans; to be somewhat of a chemist and electrician; and last, but not least, to solve knotty legal questions on insufficient data.

The successful insurance agent of to-day is not the broken-down failure of other commercial pursuits, who turns to insurance as a last refuge, as has often been stated. If he be selected from other vocations it is because he was found fit for the strenuous struggle and strife of an exacting calling, demanding much tact, perseverance, and no small amount of varied and exact knowledge and experience.

While the writer is afraid that the fire insurance agent will never reach the ideal, at least not in this world, he hopes that not only the underwriters, but also the public will recognize his usefulness as one of the most active and important educative factors in the crusade for a betterment of fire insurance conditions, and realize that he is a laborer worthy of his hire.

But, however ardently and often our enterprising friend, the insurance agent, may urge upon the public the adoption of better fire preventive and protective construction and equipment, his labor will bear little fruit unless that most powerful and educative agent and modeller of public opinion, the daily press, shall take an earnest interest in the matter, and by frequent discussion and admonition keep before the public what may truly be called the burning question of the day.

A Commercial Intelligence Bureau.

Canadian manufacturers seeking an export trade to Holland are directed to the Bureau Voor Handelsinlichtingen (Commercial Intelligence Bureau), Amsterdam, Holland. The Bureau informs the Association that it will give free of charge all information necessary for the development of business with Holland. Addresses of merchants, information regarding duties, etc., will be supplied. The only condition made is that foreign firms state references, one local bank and two commercial firms.

BOOKS FOR BUSINESS MEN.

THE USE OF MONEY.

EVERY business man is interested in banking and other financial organizations, and a plain straightforward accounts of banks loan and trust companies cannot fail to be of interest. Banking began with money changing and the selling of annuities. Money changing passed into the hands of brokers and private bankers, and the more restricted sale of credit and issuing of promises to pay, or bank notes were confined to banking in the modern sense. The sale of annuities fell into the hands of what are now known as life insurance companies and other forms of banking into those of ordinary loan companies. Of these, a special class has sprung up of late as trust companies with special powers to deal with financial transactions. Trust cumpanies have a great future. Just as large manufacturers are able in the long run to offer better service to their customers so these companies are able to give more economical and reliable services than the average individual trustee. However, the laws covering private banking, trust and loan companies are yet far from perfect, and we must not allow ourselves to rest under the fond delusion that when everything goes swimmingly during good times, revision is not in order. Indeed at the present moment there is great need for change in the law as to private banking, the deposit business of trust and loan companies and the extent of their reserves. While the book under review, Money, Banking, and Finance, by A. S. Bolles; New York, American Book Co., has the United States chiefly in mind, it will be found a useful compact volume for the readers of "Industrial Canada."

CHAMBERLAIN COMMITTEE ON AGRICULTURE.

The change of England from the self-sufficing country in respect to food products which it was before the adoption of free trade, into the entirely dependent condition in which it now is, is the essential fact brought out by the Agricultural Committee of the Chamberlain Tariff Commission. An interruption of the outside supply of food for six weeks would bring the people to the verge of ruin. The recommendations of the committee to overcome this perilous condition are of great importance to Canada. These recommendations fall under two general heads, non-fiscal and fiscal. The former have to do particularly with the land question and the necessity for the Government to supply greater facilities for the purchase of small holdings from the big land owners. But this requires a large amount of money, which the Government has not got under the present tariff, so that after all the whole question in the final analysis resolves itself into a fiscal or tariff question. In other words the committee came to the conclusion that without proper import duties, the necessary revenue cannot be provided to carry on a progressive agricultural programme.

Their proposal, therefore, is that a general tariff of 6d. per cwt. be levied on wheat, with a 3d. per cwt. preferential tariff. On other food products a general tariff is recommended of between 5 per cent. and 10 per cent., subject to negotiation for preferential treatment with the colonies. The original suggestion of Mr. Chamberlain was for a preference of 2s. per quarter on wheat. This is cut down under the present recommendation to 1s.

The report is summed up in the following paragraph:—

"We recognise that the United Kingdom will probably depend more or less upon imported food supplies, and that any material improvement of agriculture can be the outcome only of an expansion in the home demand. In these circumstances British agriculture has much to gain from the extended Colonial market for British manufactures which would result from a system of reciprocal preference and the consequently increased demand for food produce in the British industrial centres. In the case of all the proposed duties on agricultural produce we recommend that a substantial preference should be given to the British Colonies, thus opening up a wide area for negotiation. The exact amount of the preferences, on all articles except wheat, must obviously depend upon the value of the return preferences which the Colonies are willing to grant, and are therefore matters for negotiation with them. We have recommended a registration duty on Colonial as well as foreign wheat, because by this method a large permanent revenue is guaranteed, and, as we have already indicated under the head of "Local Taxation," we think that the increase of revenue from the duties proposed would remove most of the difficulties in the way of adopting the non-fiscal measures of agricultural reform which we recommended.

ORGANIZED DEMOCRACY.

Periodically the world returns to discuss the old bone of government by the people and for the people. It returns to it because the article we get is never quite up to expectations. Democracy in *theory* is the rule of intellect, or government by the common sense of the community, expressed by its representatives. But more often than not, democracy *at work* is the quiet, yet almost irresistable something called party, whose fetters, like those of nationality, are light as air but strong as steel.

Perhaps the *something* may be in very bad hands, and it will be if the people are bad, or indifferent, which is much the same. For democracy is not necessarily good, no more than a people are uniformly good. Democracy is a principle, sacred in one country, execrable in another. It all depends. The United States is working out the principle along one line, as Mr. Albert Stickney points out in his "Organized Democracy" just issued by Houghton, Mifflin & Co., ($1), and success is admittedly still afar off. It is well indeed for us to stop sometimes and consider if our ideas, popular ideas, are being followed in governmental affairs; or if the gang is playing a bluff game. More than that this much is certain, democracy can be a success only when its best citizens make it so.

Registration of Patents and Trade-Marks.

A book of thirty-two pages has been issued by Frederic B. Fetherstonhaugh, M.E., entitled, "The A.B.C. of Patents," containing a synopsis of the patent, trade-mark, designs and copyright laws in Canada and the United States, with a short reference to patents in the principal foreign countries. In the great advance in methods which is taking place in every industry the question of patents of trade-marks becomes increasingly important. The concise and clear manner in which the subjects are discussed in this booklet makes it invaluable for designers and manufacturers.

OUR NEW ZEALAND LETTER.

Wellington, 15th November, 1906.

THE Christchurch International Exhibition was opened on the 1st of November, the due date. Fine weather prevailed, and the opening ceremony was most impressive. Canada came in for much praise in the Governor's and the Premier's speeches, and the Canadian Commissioners must have felt very proud when they heard all the pleasant things which were said about their work. They fully deserved all the praise. The "Pondo" arrived in Lyttelton on the 24th of October, which left them only six days to get the 600 tons of exhibits to the Exhibition, open them up and put them in position. It seemed an almost impossible task, but it was done, and at 6 o'clock on the evening of the 31st Mr. Burns was able to send the proud message to Mr. Munro, the Chairman of the Executive,—"Canada is ready."

The Canadian Court.

The Canadian Court is laid out in such a way that every exhibit is accessible, and visible from almost any part of the court. The decorations are highly artistic, and do great credit to Mr. Despard, the Government Decorator. The colors employed are scarlet and green, tempered by the golden hue of the decorative pattern, which is composed of the straw and ears of wheat—simple, but very effective. The arches over the aisles all bear the word "Canada," surrounded by wreaths of grain ears. There cannot be any doubt from an artistic point of view, that the Canadian Court, in common parlance, "takes the cake."

Golden Opportunity Lost by Manufacturers.

From a commercial standpoint, however, it is not a marked success. Many of the best houses are missing. The whole of the Canadian Textile Industry is represented by the Hewson Woolen Mills. In pianos only the Williams Company, of Oshawa, has put in an appearance. Technical rubber goods are conspicuous by their absence. In furniture, only chairs and tables are shown. In agricultural implements and harvesting tools, only the Noxon Company is represented. In hardware, two firms only considered it worth while to apply for space. And so on right through the catalogue of the varied Canadian industries. It certainly is not the fault of the Canadian Government, nor the Canadian Manufacturers' Association. The exceedingly liberal terms of the Government ought to have brought here all the best firms of every branch of industry. It is a great pity, particularly so as Canada is favored in this country with a Preferential Tariff which actually leaves many lines in her hands. How serious a drawback this is considered to be by the United States manufacturers, is proved by their entire absence from the exhibition Canadian manufacturers had a golden opportunity to slip in and secure the bulk of the United States business. They have missed it, and it is doubtful if ever such an opportunity will be offered again. Buyers are in sympathy with Canada, and if a representative exhibit had been sent over an enormous extension of trade would have been the result.

The following is a short description of the principal Canadian exhibits. Some of the firms mentioned in this review did not apply for space, but their lines are shown by the Imperial Export Co., Ltd., of Toronto. This company has an office and staff in the Canadian Court, and intending buyers are well looked after. The I. E. C. has an office in Auckland, with extensive sample rooms, and they are considered the pioneers for the Canadian trade in New Zealand. Mr. de Schryver, well known to many of your readers, is the Managing Director for the Company in New Zealand.

THE EXHIBITS.

The Dodge Manufacturing Company, Ltd., Toronto, have a fine exhibit of their various pulleys, split wood and iron, collars, hangers, etc.

The Hart Corundum Wheel Co., Hamilton. Much interest is taken in the exhibit of this company. Thus far carborundum has held this market, but I am certain that this will change and corundum will take its place. The Government pamphlet on corundum does good work in making converts.

The Victorian Wheel Works, Galt, have on view two sets of Sarven Wheels. As this line is protected by 11% in favor of Canada, business ought to be done, provided prices are right. This firm ought also to have exhibited their other lines, as there is a large number of carriage and cart builders throughout the country.

Ontario Wind Engine and Pump Co., Ltd., Toronto, have erected one of their well-known windmill pump engines. If this firm had sent a 6′ Aerometer instead of an 8′ one it would have been better. This country is windswept almost all the year round, and a smaller wheel will do more work here than a larger one in Canada. As far as I can learn from their list the 8′ wheel is the smallest they make. If they wish to get the business here a 6′ wheel is imperative.

The Kerr Engine Company, Limited, Walkerville, exhibit only four steam valves, but these are of good appearance and value.

The Noxon Co., Ltd., Ingersoll, exhibit a reaper and and binder, a disc-plow and a mower.

R. Chestnut & Sons, Fredericton, N. B., have three of their famous canoes on show, which are generally admired. As the Avon, which flows in a most erratic manner through the Cathedral City is just made for canoeing, there ought to be a good prospect for the sale of this kind of craft.

The Peterborough Canoe Co., Limited, Peterborough, have on show five canoes of various descriptions, and their stand is daily surrounded by admiring oarsmen, and there are good indications for the belief that the Peterborough Canoe Co. will not regret having sent their exhibit to this far away part of the world.

R. Richardson & Co., St. Mary's, have exhibited a 400 gallon churn and butter worker, which draws the attention of all the visiting dairymen. No doubt a good many of these machines could be sold if properly pushed. There are also a few Babcock and "Peerless" Testers.

The Pacific Coast Pipe Co., Limited, Vancouver, have on exhibit a few of their wooden stave pipes for waterworks. At the present time the N. Z. Government is laying down 17 miles of this pipe at Rotorua, the centre of the famous Hot Lakes District. If this proves a success a big demand may be expected to spring up.

The Hamilton Incubator Company, Limited, exhibit three incubators and one brooder. This is one of the lines that want practical demonstration and some advertising. Poultry farming is increasing at a rapid pace, and a good incubator finds a ready sale.

The Canada Cycle and Motor Co., Limited, Toronto, have on show one of their famous "Russell" cars and some cycles.

The Imperial Writing Machine Co., Limited, Montreal, are exhibiting four of their Empire typewriters. The machine looks very compact and simple and if everything is true that the makers claim for it, it ought to sell well. It is, however, very difficult to get a new typewriter introduced, and the company must be prepared to do some big advertising.

The Montreal Rolling Mills, Limited, Montreal, have a small but very attractive display of wire nails. This firm is doing the bulk of the nail trade in this Colony, but I hear their output is not large enough to satisfy the demand promptly. As this particular line is protected at the rate of $5 per ton, the firm ought to do well, and it would be a pity if trade drifted away for the reason mentioned above.

The E. B. Eddy Company, Limited, Hull, have a very interesting exhibit, showing first the various pulpwoods, then the pulp, and ultimately the finished paper. In addition they show samples of packing, cover and toilet papers, etc., and indurated fibre ware.

The Canada Paper Co., Ltd., Windsor Mills. This firm exhibits a few reels and packages of "news,"

John Harrison & Sons Company, Owen Sound. This firm shows a quantity of skewers from 4½" to 16" in maple. I am informed that this market so far only buys hickory skewers. It may be possible that it is only a prejudice, and if the maple skewers should be tried they would be found just as suitable.

Taylor, Scott & Company, Toronto, show a line of washboards, steps and other household utensils, also a few sets of croquet and toys. There ought to be a good market here for many of the articles shown, but it will be necessary for the firm to have an agent in New Zealand to push these lines along.

The Waggoner Ladder Company, London, show only one of their ladders and nothing else. This firm makes some very saleable lines which ought to have been shown, such as their cloth reels and lawn swings.

E. T. Wright & Co., Hamilton, have on exhibit a complete line of their manufactures. They ought to do well as these goods are protected against the United States (their only competition), by 11%.

The Canada Carriage Company, Brockville, show five different vehicles, amongst which their Nos. 102, 82 and 121 are much admired. It is a pity that all their carriages have their wheels so low, which is a drawback in a country with streams which have very often to be forded at a depth of three feet.

C. Kloepfer, Toronto, exhibits some carriage parts, as bodies, hoods and seats. I fear that the freight charges will militate against the importation of these lines, which can be equally well manufactured in this country.

R. S. Williams & Sons Co., Ltd., Toronto, have a modest show of banjos, guitars and other stringed instruments. The sale in this country in these lines is very limited, though on the increase.

The Williams Piano Co., Oshawa, show only two pianos, but these are got up in really good taste, particularly the one in inlaid mahogany. Experts consider the tone of these pianos very good, and also the workmanship inside. The prices, however, are rather too high for this market to expect a good sale.

The Thomas Organ Company, Woodstock, exhibit a number of their well-known instruments. Their organs are well introduced into this country, and I believe do more business here than all other Canadian manufacturers combined.

The Sherlock Manning Organ Co., London, have on show three organs which are very much admired. It is a pity that this firm did not send out one or two of their cheaper organs, as the bulk of the trade here is done in that class of instrument.

The Goderich Organ Co., Ltd., of Goderich, have on exhibition four different organs which ought to sell here if properly pushed. They also are exhibiting a line of W. C. seats.

The McClary Mfg. Co., London. The principal feature of this firm's exhibit is a huge kitchen stove, the "Pandora." It is a very complete range containing many striking novelties. It is drawing great attention, particularly on the part of lady visitors. Unfortunately all the ranges in use in this Colony are built in. No house is let without the necessary fireplaces and kitchen range. If the "Pandora" could be arranged that it could be built in and still have all the new features it certainly would take on. This firm also shows a splendid gas range which also comes in for much favorable comment. There is more chance for this stove to find a market than the "Pandora." There is also a kitchen dresser which is so different from what the housewives are accustomed to in this country that the exclamations of wonder never cease. An oil heater and a small assortment of enamelled kitchen utensils completes this attractive exhiibt.

Hewson Woolen Mills, Ltd., Amherst, N. S., make a brave show of their famous Hewson tweeds. As the manufacture of tweeds and worsted is highly developed in New Zealand, it will be rather uphill work to introduce the Canadian article. But there is nothing like trying.

The Canadian Rubber Company of Montreal, Limited, Montreal, have a fine exhibit of all kinds of rubber boots and shoes, rubber heels, etc.

The Maple Leaf Rubber Co., Limited, Port Dalhousie. This firm has on show a full line of their rubber footwear; curiously enough it is the only line adequately represented.

The Berlin Rubber Mfg. Co., Ltd., Berlin. This company exhibit a full line of their rubber footwear.

The Wm. Marsh Co., Ltd., Quebec, have their footwear displayed to great advantage in a glass case.

The Hurlbut Co., Ltd., Toronto, have a good line of baby footwear, but as England has an enormous hold on the market in this particular line it will be pretty hard to get a footing.

The Brackman Kerr Milling Co., Ltd., Victoria, B. C., have a fine exhibit of their specialties, Canadian Flakes, oatmeal, etc., This country is at present overrun with all sorts of cereal foods, and it will not be easy to slip in.

The Truro Condensed Milk Co., Ltd., Truro, have a good display of three brands of condensed milk. There is a strong competition in this market; there are many locally produced brands. It is all a matter of price and quality.

The A. F. Maclaren Imperial Cheese Co., Ltd., Toronto, make a fine show of their cream cheese. This cheese was introduced into this Colony some years ago, and can be found in all the better class grocery establishments. This is very creditable and proves the high value of this product, as New Zealand produces as good cheese as any country in the world.

The Ingersoll Packing Co., Ltd., Ingersoll, exhibit Millar's Royal Paragon Cheese. Their display is got up in very good taste.

The Government Mineral Exhibit is splendid and one of the features of the Exhibition. Genial Mr. Broadbent, who is in charge of this department deserves great credit for the business-like and at the same time elegant arrangement of this exhibit. None better.

"Cosmopolitan."

THE PROPOSED EIGHT-HOUR DAY BILL

No. 32.] **BILL.** [1906-7

An Act respecting the hours of labour on Public Works.

HIS Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

1. Every contract to which the Government of Canada is a party which may involve the employment of labourers, workmen or mechanics, shall contain a stipulation that no labourer, workman or mechanic in the employ of the contractor or sub-contractor, or other persons doing or contracting to do the whole or a part of the work contemplated by the contract, shall be permitted or required to work more than eight hours in any one calendar day, except in cases of extraordinary emergency caused by fire, flood or danger to life or property. Eight-hour day.

2. Every such contract hereafter made shall contain a provision that unless the person or corporation making or performing it complies with the provisions of this Act, the contract shall be void and the person or corporation shall not be entitled to receive any sum, nor shall any officer, agent or employee of the Government of Canada pay or authorize payment from the funds under his charge or control to the person or corporation, for work done upon or in connection with the contract which in its form or manner of performance violates the provisions of this Act. Stipulation in contracts.

3. This Act shall apply to work undertaken by the Government of Canada by day labour. Day labour.

THE above bill has been introduced into the Federal House of Commons. Its provisions are pernicious and to a high degree inimical to the best interests of the industrial life of the country. Year by year manufacturers are hemmed in by legislative restrictions, which make the successful conduct of business increasingly difficult. In spite of the harder and more continuous competition which is being met with and the keener fight for markets, the efforts of manufacturers are being constantly nullified or made barren by governmental regulations.

The bill quoted above is a fair sample of these restraints. Few factories are kept open for only eight hours a day. That has not become the recognized working period. In the industrial countries of Europe, with whom we have to compete, the working day is one, two or three hours longer than here. We are at present on an equality with the United States. It is not an exaggeration to say that ninety per cent. of the workmen of this country work at least nine hours a day. Why then should the Government disturb industrial conditions and sow dissatisfaction among a vast majority of the working classes? Competition is such that manufacturers cannot adopt the eight-hour day, yet if this bill were passed every workman would see those who were engaged on Government contracts completing their day's work in that time.

To employ men, some of whom are working on government work and some not, is impracticable, unless the same number of hours obtain for all. How is it possible to follow all the operations of manufacture, where probably thousands of some article are being made and only a portion of them for the Government, and determine whether or not the latter were done during an eight-hour day? A manufacturer would be prevented from taking government work under such conditions. Nothing but industrial disorganization could result.

The dilemma is presented either of establishing an eight-hour day for the whole factory or refusing to manufacture anything for the Government. The great financial loss of the former policy should be fairly understood. It means tying up an expensive plant for one hour more every day. This constitutes a dead loss. If a machine has a capacity of one thousand an hour, it means a loss of just that much per day. In other words there are certain fixed expenses which are the same, whether the production is eight thousand or nine thousand per day. If the factory is just run for eight hours a day the cost per article produced will be so much greater. Moreover the workmen will demand a day's pay whether they work eight or nine hours.

Again a serious injustice would be done the final contractor. What he receives as raw material has been worked on probably by a dozen previous workmen. It is manifestly impossible to regulate all work leading up to the final product. The manufacturer of the finished article alone is circumscribed.

Paternal legislation has long been discredited. Yet this is virtually what the eight hour bill represents. It places an artificial value on labor with the implied intention of forcing the general acceptance of this valuation. This it does by establishing a favored class of workmen. Dissatisfaction is aroused at once and a general agitation is stirred up for similar treatment.

The bill now before Parliament should not be allowed to pass. It is a distinct interference with the right of manufacturers to run their own factories. There is no question involved requiring the supervision of Parliament. The rights or health of workmen are not threatened. The internal economy of the factory should be left to the employer.



MR. J. F. M. STEWART
Who has resigned from the General Secretaryship of the Association.



MR. G. M. MURRAY
Who has been appointed General Secretary in succession to Mr. Stewart.

DEMAND FOR COPPER.

Next to iron, one of the most profitable metals seems to be copper, and the demand for it is growing in a far greater ratio than is the supply, importantly enlarged as that has been within the last decade. All markets are hungry for copper, and, stimulated by this demand, the price has doubled since 1890 and production has made notable increases, particularly in our own country.

The extension of the use of electricity for power and lighting purposes has created the almost insatiable demand for copper, but there are other fields in which extension of its use is also notable. Among these is the manufacture of brass and bronze, the use of both of which has expanded in many utilitarian, as well as ornamental forms, and a larger amount of which is in such form that the quantity used is permanently withdrawn from re-use, as is the case with many forms that find the same copper back in the crucible within a few years.

It is estimated that the demand for copper is now close to, if it does not exceed 25,000,000 pounds annually. The danger, therefore, is, not that there will be an over-production, but a shortage that will advance the price to a point that will prohibit its use in many directions.—"Industrial World."

PETROLIT, A NEW INVENTION.

An invention made by the Swedish marine engineer, Mr. Hugo Medberg, and which it is said, will be a hard competitor of kerosene oil for both lighting and power purposes, appears to be an assured success according to the Swedish paper "Dagens Nyheter." The inventor disposed of the patent a couple of months ago at a comparatively insignificant price, while the present owners of the patent, who also are Swedes, ask thirty million francs for it, and they already have had many offers. Even Rockefeller is said to have entered into negotiations to acquire the novelty, which he fears will be a dangerous competitor.

The invention, called "Petrolit," has quite remarkable properties. The light, which this new article gives, is said to be stronger and more pleasant than that of kerosene and the energy for power purposes greater than a corresponding quantity of kerosene. "Petrolit" is produced from common wood-tar, which under the influences of certain stuffs, this is the secret of the invention, is mixed with water. In countries with plenty of wood-tar, the new product will come very cheap, and it is figured that "Petrolit" may be sold for less than 1½ cents per litre, or about 6 cents per gallon.

If the invention does what it promises, it will readily be seen of what enormous consequences it will be. Trials have proven that "Petrolit" is fully as well fit for automobiles as benzine. Another advantage over both kerosene and benzine is that "Petrolit" burns absolutely odorless. Report of C. E. Sontum, Canadian Commercial Agent at Christiania.

ADVERTISING CANADIAN INDUSTRIES

By J. ANGUS MacDONALD

Author "Successful Advertising—How to Accomplish It."

Trade Paper Advertising.

TRADE paper advertising is not generally accorded the high appreciation it deserves. Manufacturers and wholesalers who intelligently use trade papers find this form of advertising a very profitable one. A brief analysis of any representative trade paper and its clientele will show why trade paper publicity pays the intelligent advertiser. Being an intelligent advertiser he uses his advertising space to the best adavntage with copy and illustrations that mean something.

The trade paper circulates among subscribers who read it most carefully. Each subscriber takes it for one object, viz., *to help his business prospects.* He pays a fair price for its yearly subscription. Each issue is carefully read for there is always in it something that has a direct or indirect bearing upon his business. Matter that appears in a trade paper is carefully compiled and authorative. Leading writers are paid good prices for special articles. Trade paper editors are most studious in collecting statistical and other information for the benefit of their readers. They guard against admitting into their columns matter uninteresting, uninstructive, and unreliable. Speaking constantly to one class of business men and studying continually and consistently all kinds of methods by which its readers may be benefited in a business way the well edited trade paper of to-day receives from its subscribers a degree of close and serious attention far beyond what is given in the hasty reading of a daily paper, or even in the perusal of a popular magazine during moments of relaxation.

The Right Paper is Read.

Go in the office of any "go-ahead" warehouse, wholesale house, or retail store and you will be sure to find a trade paper—or several. The boss reads the trade paper; he wishes to keep posted, as to "what is doing" in his field. The managers read it; they must be informed as to innovations and improvements in their respective lines. The clerks eagerly look it over when opportune occasions occur; they realize that success with them depends much upon being well-informed and up-to-now and one of the best helps in this direction is the trade paper.

It does not take a very lengthy analysis to prove that the well edited trade paper is read and read religiously. It may not have an enormous circulation, but the circulation it has is well worth going after. This circulation possesses *character and influence.* It is composed of readers who are business men; who are in business to buy or sell. They are in the market for probably just the lines you have to sell. If so their ears are inclined to listen to favorable propositions, and if you have a proposition to place before them, no shorter, more direct or more inexpensive advertising medium can be found to reach this class of customers than the trade paper circulating among them.

Circulation all Valuable.

As a trade paper represents in its most literal term a class publication, i.e., *a publication circulating among a certain class,* there is mighty little waste in its circulation. There is not much "scattering shot" in its circulation for in the very nature of things all of it is directed too near the bull's eye. And there is a lot of satisfaction to the advertiser when he realizes that he is not paying for circulation of no value to his business.

Readers of trade papers have money—lots of it They are not afraid as the renowned Mr. William Devery, of New York, so elegantly expressed it, of "keepin their money workin." It is their business to do so, and make more money in the course of the "workin." Having large bank accounts and constantly circulating cash in the course of their business activities, the advertiser handling their goods finds them an ideal class to appeal to with his advertising.

Some publications appeal to an impecunious class of subscribers. Some circulate among subscribers notoriously mean and stingy. The reader can instantly think of one or more papers of such lists; I will not hurt the feelings of some business managers trying to run such mediums by mentioning names. The trade paper does not appeal to the impecunious or stingy; it goes straight to the men of affairs and money—the average business man who is buying constantly, has plenty of money to buy with, is liberal in his views, and is accustomed to quick decisions. There is no better business man to do business with than the business man. The purist may say that the preceding sentence is tautological, but the reader knows what I am driving at—that the average business man is the most satisfactory person to do business with for he is prompt, responsive, and is "there with the goods," whether it is "yes," "no," merchandize or payment.

Prepare Good Copy.

The weakness of most trade paper advertising lies in the ordinary or indifferent attention given its preparation. Good copy is the soul of advertising. Space bought in a trade paper, or in any other medium, should be filled with the best copy possible.

It is not so much how much you say, it is what you say and how you say it that attracts attention. As long as you have an advertising contract with a trade paper see that this space is filled up with the best kind of advertising.

Some farmers could take a 200 acre farm and raise a fine crop af Canada thistles. Others, more thrifty and intelligent, could take a 20-acre patch and raise so liberal and diversified a crop of vegetables as to mean a very considerable acquisition to an income. It is all in the way the ground is tilled and cared for.

Same way with trade paper advertising. There is so much space to be used; how to use it to the best advantage should receive the advertiser's earnest attention.

A "business card" in a trade paper is better than nothing, but an advertisement that says something specific and interesting about what is being offered is better than the "business card." An advertisement should contain information pleasingly put and information concerning goods, prices, terms, time, delivery, styles, colors, assortments, etc., is appreciated by the party interested enough to read the ad. This information is easily procurable; all the advertiser has to do is to give a brief study to his offerings, and embody the result of this study in the ads. If the reader is in a fair way to become a customer he is looking for such information. When he cannot get it from the ad. he is obliged to go to further trouble to secure it—to write for it, to look it up in a catalogue or booklet, to visit the advertiser, or have a representative of the advertiser visit him. Which means a lot of bother that could be avoided if the advertiser in the first place stated such information in his advertisements.

We must admit, however, that there are occasions when it is not good business to boldly give a lot of information in ads. Competitors in such instances would profit too much by the information so frankly stated. The advertiser himself, of course, is the best judge of such conditions.

But in all cases some definite and interesting information regarding what is being advertised can be stated in the ads. Such information gives the advertising a body and flavor and edge—to the additional advantage of the trade paper advertiser.

IS THE MOTOR DRIVE ECONOMICAL?

By George H. Schaeffer.

OF recent years engineers have discussed the power lost in shafting and belting, the great amount of space taken up by the same, the high cost of maintenance, the liability of breakdowns and the inflexibility of belt-driven machinery.

It is the purpose of this article to give a short comparison between belt-driven and motor-driven machinery, and also to give the advantages of the latter.

With the advent of the electric motor there came a probable solution for belt-drive. Up to 1900 few manufacturers had adopted motor-drive and its use was not advocated. At the present time, however, the motor has reached a high state of perfection and is vastly superior and much cheaper than it was several years ago. Since 1900 practically all large manufacturers have adopted it.

The question which first concerns the manufacturer is: What advantage is there in the use of the electric motor, and what is the cost of its installation as compared with shafting and belting? I will consider the operating expenses under each class of drive, viz., motor and belt.

Annual Fuel Expenses.

This depends on the efficiency of transmitting power to the machines. The average loss of power in belt and shaft transmission for about 50 shops, half in France and half in the United States, was 40 per cent. of the power generated, making the efficiency 60 per cent. On the the other hand, with electric drive, allowing 93 per cent. efficiency for the generator, 80 per cent. for the motors, 95 per cent. for transmission or loss in line (which are quite low), we get an efficiency of 70 per cent. This means an increase of 10 per cent. over belt drive and consequently a reduction in the fuel bill of 10 per cent.

Annual Expense of Attendance.

It is a well-known fact that belting must be adjusted once a month, and the shafting cleaned weekly. With a motor one oiling lasts from two to three months and no attendance is required except a man to start and stop it, and the man in charge of the machine does this. This makes the cost of attendance of the motor almost negligible.

Annual Cost of Repairs.

With an engine and intermediate gearing, bearings must be renewed, the shafting inspected and the belting repaired or renewed frequently. On the other hand, with motor drive, having an engine coupled to a generator, we avoid this trouble and expense. As far as the motors are concerned the repairs are negligible. Here is an instance: In the shop of the Allgemeine Electricitats Gesellschaft, where 500 motors are installed at the present time only 39 had to be repaired in 30 months.

Frequency and Duration of Breakdowns and the Effect on the Plant.

A breakdown in any shop results in a loss, and the larger the shop the greater the loss. With motor drive breakdowns are reduced 75 per cent.

In a modern shop the greatest item of expense is the wages. On an average three men are employed per horse-power. Anything which will increase the output per horse-power without increasing the wage item is of the greatest importance. The question as to the advantage of electric drive hinges chiefly upon the effect on the output of the product per man per machine. This in turn depends on:—

I. The general arrangement of machinery to facilitate the handling of work. With shafting the machines must be placed with regard to the line shaft. Motor-driven machines can be placed in any convenient position.

II. Clear headroom for use of electric cranes and small hoists. With belt-driven machines, travelling cranes and small hoists are at a great disadvantage.

III. Light and cleanliness. The output or work per man greatly depends upon his surroundings. The lighter and cleaner his surroundings, the more pleasant will be his disposition.

IV. Speed control. It is absolutely necessary that the speed of the machine be under perfect control, and that the speed be capable of variation over a large range. The control of speed is accomplished more quickly and at less expense with the motor than by any other method.

V. Use of electricity for other purposes than power. Besides running machinery we can use electricity for lighting, welding, brazing, soldering, etc. This varied usefulness tends to foster these different operations and thus increase the scope of work in any one shop.

Another advantage is that for a given horse-power of engine more machines can be used with electric-drive than with belt-drive. This follows from the fact that a certain number of machines are idle all the time, but their shafts and belts are continuously running and therefore absorbing power. With the electric-drive this power can be used to drive extra machines.

Experience has shown that the average load on the generator is 20 per cent., and maximum load 35 per cent. of the motor rating. Therefore, to get full load on the generator we must install five times as much motor horse-power as generator horse-power. An example of this is shown by the installation of electric-drive at the Baldwin Locomotive Works, where the capacity of the generators was estimated four motor horse-power.

In short, the advantages of motor-drive are the increased output per man, good speed regulation and greater efficiency of machine drive. In regard to first cost it may be stated that in some cases, for example in a mill, the first cost of electric-drive is cheaper than belt-drive. On the other hand, in a machine shop electric-drive is the more expensive. It has been estimated that the saving in power by using motor-drive will pay the cost of the plant in from one to five years.—"American Machinist."

Silliker & Co., of Amherst, whose plant in that city was destroyed by fire recently, are being offered inducements to establish a factory at Halifax. The proposition is to capitalize the company at $375,000; one-third to be subscribed by citizens of Halifax, one-third by Silliker & Co., and the city will guarantee bonds for $125,000, bearing 5 per cent interest, and redeemable in 30 years.

AMONG THE INDUSTRIES

The Howe Sound Copper Company will install a 600-ton furnace at an early date.

A new cotton company is being formed and will erect large mills at Lachine, Que.

The Toronto Plate Glass Company will erect a new factory at a cost of $16,000.

The Canada Carriage Company have just opened a three-storey addition to their factory in Brockville.

The B. F. Graham Lumber Company will build a saw mill with a capacity of 150,000 feet of lumber per day.

The Nova Scotia Steel and Coal Co. will add another blast furnace to their plant at Sydney Mines in the spring.

The National Spring & Wire Company have leased a factory in St. Catharines and will get into operation in the near future.

The Chapman Double Roller Ball Bearing Co., are erecting a factory on Sorauren Avenue, Toronto. The building will cost $10,000.

Gaar, Scott & Co., of Richmond, Ind., threshing machinery manufacturers, intend locating a plant in Canada. Winnipeg is being favorably considered.

The woolen mills in Hull, P.Q., formerly owned by the Caldwell Company, have been sold to Mr. T. Lindsay, who intends operating them at their full capacity.

A new tannery is planned for Sydney, N.S. Mr. M. Crofton is promoting the scheme and has secured a considerable amount of local capital to carry it through.

The citizens of Sydney have voted to grant a bonus of $50,000 to the new Rolling Mills Company. The company will begin building operations as soon as possible.

The new mill of the Farmers' Milling & Elevator Co., Ltd., at Prince Albert, is almost completed. The building is finished and installation of machinery is now going on.

A rolling mill for Vancouver Island is suggested. There are extensive iron deposits on the island, and it is reported that negotiations for the establishment of a rail mill are in progress.

The municipality of Wingham will lend the Wingham Carriage Company $5,000 for a term of ten years. The company will erect a building 50 by 96 feet, and will employ from 20 to 25 hands.

The Dominion Carriage Company, Ltd., have been incorporated with a capital of a quarter of a million dollars. They will establish a factory in Truro, N.S., and build all kinds of carriages and sleighs.

The plant of the Goderich Engine and Bicycle Co., Limited, has been purchased by the Rogers Manufacturing Co., of Toronto. General foundry and railway specialty work will be done in the shops.

New York capitalists are in communication with the municipal council of Goderich, with a view to building a $5,000,000 steel plant. The concern would employ fifteen hundred hands, and would occupy one hundred acres of land.

A new cotton mill to be controlled by the Dominion Textile Co., Ltd., will be erected at Shawinigan Falls, Que. This mill will operate 100,000 spindles, and employ 2,000 hands. It is expected that it will be in operation by the fall of 1907.

Gaar, Scott & Co., of Richmond, Ind., will locate a large branch factory in Winnipeg, according to reports from that city. Threshing machines are manufactured by this company, which is one of the largest concerns of its kind in the United States.

The Canada Refining Company are considering the establishment of a large plant in Hull, P.Q. The company have an option on property along the river front and will erect buildings to the value of $750,000, and employ about 600 men if the deal goes through.

John Crossley & Sons, of Halifax, Eng., and Messrs. Humphrey, of Kidderminster, Eng., both prominent carpet manufacturing firms, are going to unite in establishing a carpet factory in Canada. Representatives have looked over the possibilities of location, etc., in Hamilton.

The Gilsen Manufacturing Co., of Port Washington, Wisconsin, will establish a branch plant in Guelph, Ont., if satisfactory arrangements regarding taxation, etc., are made. The company manufactures gasoline engines, office chair irons and other foundry and machine shop products.

Fire caused a loss of $25,000 to the Robb Engineering Company recently. The fire originated in the offices and spread thence to the pattern shop. Many new and valuable patterns were destroyed, but the blue prints were all preserved. Little damage was done to the machine shop.

The ratepayers of Port Arthur have voted to guarantee 75,000 worth of bonds for the Meisel Manufacturing Co., and to loan the Seaman-Kent Co. $15,000. The Meisel Co. will establish works for the manufacture of mill machinery and heavy harvesting implements. The Seaman-Kent Co.'s factory will be devoted to the manufacture of hardwood flooring mantels, etc.

The Philip Carey Manufacturing Company, of Cincinnati, will establish a branch plant in Hamilton. The company manufactures flexible and cement roofings, asbestos pipe and boiler coverings, and all products in which asbestos and asphalt materials are used. About fifty men will be employed at first, but this number will be increased to one hundred in a short time.

A project is on foot to establish a large car building plant in St. John, N.B. Hon. Mr. Emerson has been approached on the question of getting some work from the Intercolonial, and encouragement has been received. Motor cars will also be built in the shops. T. H. Estabrooks, J. A. Likely, R. G. Haley, James Pender, and W. S. Fisher are actively interested in the movement.

The North American Cobalt Refining Company, Limited, will build a cobalt smelter. They have been carrying on investigations for the past six months, and it is reported that these have been thoroughly successful. Arsenic, cobalt, and other by-products have been completely separated from the silver. The proposed smelter will have a capacity of 500 tons a day, and will cost approximately $200,000.

A car ferry is being built for the Grand Trunk Railway Company by the Canadian Shipbuilding Company, Toronto. It will be 320 feet long by 50 feet wide, and when loaded will draw 15 feet of water. The boat will be run from Rochester to some port on the Canadian side, and will make trips summer and winter alike. The excessive transportation over the Suspension Bridge is given as the reason for establishing the ferry.

TRADE ENQUIRIES

NOTE—For further information regarding any enquiry mentioned under this heading or the name of enquirers, apply by number to the Secretary, of Toronto,

132 **Agencies.**—A newly established commission house in **Manchester, England,** which expects to specialize on Canadian supplies, desires to be placed in touch with Canadian shippers of provisions, general produce, leather, etc., open to appoint agents in that quarter.

133 A commercial traveller of wide experience and connections throughout **England** is open to make engagements with a few reliable Canadian firms with a view to exclusive representation. First-class references supplied.

134 **Apples, etc.**—A firm of importers in **South Wales** is desirous of getting into touch with a few large exporters of apples and other fruit from Canada.

135 **Asbestos and Mica.**—A **Birmingham, England,** firm wishes to hear from Canadian firms open to supply asbestos and mica.

136 **Ash.**—An agricultural implement manufacturer requests prices of ash in sizes, 4 feet by 2½ inches by 2¼ inches, and 3 feet 6 inches by 1⅞-inch by 1¾-inch, from Canadian exporters.

137 **Birch Squares.**—A **Manchester, England,** firm, with large connections, wishes to obtain prices of birch squares, sizes ⅞-inch by ⅞-inch, up to 3-inch by 3-inch, from Canadian manufacturers.

138 **Box Shooks.**—A **London, England,** firm which already ships considerable quantities of Canadian and other goods to South Africa, is seeking to obtain names of firms in a position to supply box shooks for fruit for the South African trade.

139 **Broom Handle Machines.**—A correspondent in **Liverpool, England,** desires to purchase the latest and best machines for manufacturing broom handles.

140 **Calcium Carbide.**—A **Manchester, England,** firm asks for prices of calcium carbide, c.i.f., Manchester, from Canadian exporters.

141 **Canned Fish.**—Quotations are asked c.i.f. **London, England,** on all kinds of canned fish by a reliable house wishing to handle it as a side line.

142 **Carpet Paper Felt.**—A **Manchester, England,** firm requests prices and samples of carpet paper felt from Canadian manufacturers of same.

143 **Cigarettes, Resin, Woodenware.**—A firm of manufacturers' agents in **Vienna, Austria,** able to supply first-class references, would like to represent a few Canadian shippers of the above.

144 **Condensed Milk.**—A good market for this line is said to exist on the West Coast of Africa, and a **Liverpool, England,** firm, with wide connections, would like to hear from Canadian producers.

145 **Corundum.**—Inquiry has been received from **Holland** for names of producers and exporters of corundum in Canada.

146 **Dairy Produce and Tinned Fruit.**—A **Dublin, Ireland,** firm would like to hear from shippers of dairy produce and tinned fruit.

147 **Doors.**—A firm in **Newcastle-on-Tyne, England,** importing large quantities of Swedish doors invite correspondence from Canadian manufacturers who are open to give them an agency.

148 **Flax Seed and Linseed Cake.**—A **Liverpool, England,** firm invites correspondence from Canadian shippers of flax seed and linseed cake.

149 **Grass and Clover Seed.**—**Manchester, England,** firms wish to correspond with Canadian exporters of grass and clover seed.

150 **Grass and Clover Seed.**—**Liverpool, England,** firms ask for prices and samples of grass and clover seed from Canadian exporters.

151 **Groceries, Drugs, etc.**—A **London, England,** firm with branch offices in the provinces, desires to correspond with a Canadian house wishing to place goods on the English market, especially in the grocery, druggist and allied trades.

152 **Handles (Bent Wood).**—Full particulars regarding this line are desired by an **Ontario** manufacturer, who proposes to use it in making baby carriages and chairs.

153 **Handles.**—A **Lancashire, England,** firm asks for prices of spade and pick handles from Canadian manufacturers of same

154 **Handles.**—A **Birmingham, England,** firm is open to purchase large quantities of handles for chisels, awls, etc.

155 **Hardware.**—A **Birmingham, England,** firm trading with South Africa inquires for firms manufacturing general hardware such as hammers, saws, etc., agricultural implements, including ploughs, harrows, hoes, shovels, rakes, and anything made in Canada for general South African trade.

156 **Hardwood Stems.**—A **Lancashire, England,** firm asks for prices of hardwood stems, 2 feet 8 inches long by 1½ inches diameter at one end, reducing to 1 7-16 inches at the other, from Canadian exporters.

157 **Laths and Window Frames.**—A **Cheshire, England,** firm of manufacturers and builders' merchants wishes to correspond with Canadian manufacturers of laths and window frames.

158 **Lath Timber and Pit Drops.**—A **Hull, England,** timber firm asks for Canadian firms able to supply large quantities of suitable timber for the making of laths for house building purposes. The same firm also inquires for Canadian shippers of pit props as follows:—6 feet long, 5½-inch top; 5½ feet long, 5½-inch top; 6 feet long, 6-inch top; 6½-inch top; 10 feet long, 8-inch top; 9 feet long, 7-inch top.

159 **Metallic Capsules.**—Enquiry is made for the above by a firm of vinegar brewers in **London, England,** who are prepared to buy from 500,000 up per annum. They must be bright colors, plain and stamped, top and sides same color, in lines 15 x 18, and 16 x 18. English Bank reference.

160 **Motors.**—A firm of steamship brokers in **Norway** would like to hear from Canadian makers of motors suitable for yachts and fishing boats, with a view to undertaking a general agency for that country.

161 **Nuts and Bolts.**—A **Lancashire, England,** manufacturing firm desires to obtain prices of nuts and bolts from Canadian exporters.

162 **Ores, Mineral, etc.**—A **Hamburg, Germany,** firm with good connections is desirous of hearing from Canadian producers and exporters of ores, minerals, and rare earths.

163 **Pine Doors.**—A **Staffordshire, England,** firm would like to hear from Canadian firms in a position to supply yellow pine doors.

164 **Pit Props.**—A **Yorkshire, England,** timber firm is open for prices (72 lineal feet), c.i.f., Hull, for pit props free from bark and of good sound quality—shipments monthly, or from December, 1906, to May, 1907.

166 **Portland Cement.**—A correspondent in **Hamilton, Bermuda,** is prepared to place a trial order for 100 bbls. Canadian Portland cement, and invites quotations, delivered Hamilton. Toronto reference supplied.

167 **Rubber Goods.**—A **Birmingham, England,** firm wishes to hear from Canadian firms open to ship all kinds of rubber goods, more particularly for mechanical purposes.

168 **Salmon and Poultry.**—A **Birmingham, England,** importer of salmon and poultry would like to hear from Canadian firms open to ship quantities.

169 **Sheeting, Undyed Drills and Colored Cotton Duck.**—A member of the C.M.A. in **Southern Ontario** desires to purchase the above from some reliable Canadian producer, to be used in the manufacture of tennis shoes.

170 **Soda Fountains.**—A **Liverpool, England,** firm, with extensive connections, asks for correspondence from Canadian manufacturers of soda fountains, the use of which is very limited in Manchester.

171 **Surveying Instruments.**—A subscriber to "Industrial Canada" in the **Island of Tobago, B.W.I.,** enquires for compasses, levels, and measuring chains of Canadian manufacture.

172 **Timber.**—A **Yorkshire, England,** firm asks to be placed in communication with Canadian shippers of yellow pine:—4 in. to 5 in. wide, and 3 in. by 7 to 16 feet long. Pine flitches, 4 in. x 5 in. Maple, 9-16-in. x 4 in., 4½ in., and 5 in. Timber to be free from knots, heart, shake and sapwood, and in primest condition.

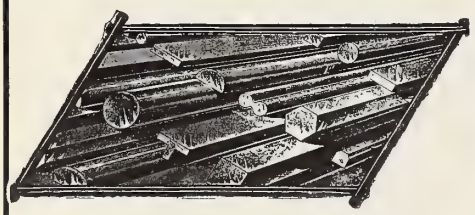
173 **White Haricot Beans.**—A **London, England,** firm is desirous of corresponding with Canadian exporters of white haricot beans.

174 **Wood Fibre, Excelsior Asbestos.**—A **Birmingham, England,** firm wishes to hear from Canadian shippers of the above.

175 **Wood Alcohol.**—A **London, England,** firm asks to be placed in communication with Canadian firms manufacturing purified wood alcohol, which they are in a position to import in large quantities.

176 **Wooden Handles.**—A **Birmingham, England,** firm is open to purchase large quantities of wooden handles.

177 **Wooden Cycle Rims.**—A **London, England,** firm wishes to get in touch with Canadian firms who would undertake to manufacture wooden cycle rims. An unlimited trade can be done.



SHAFTING

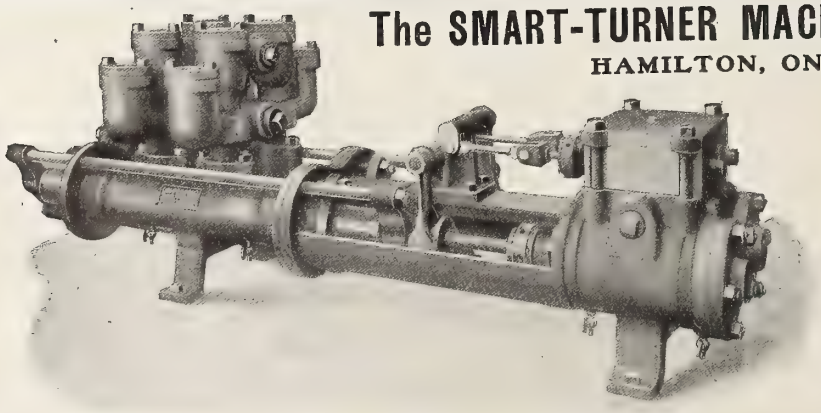
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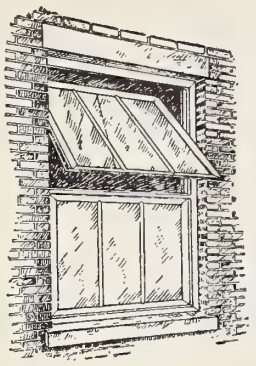
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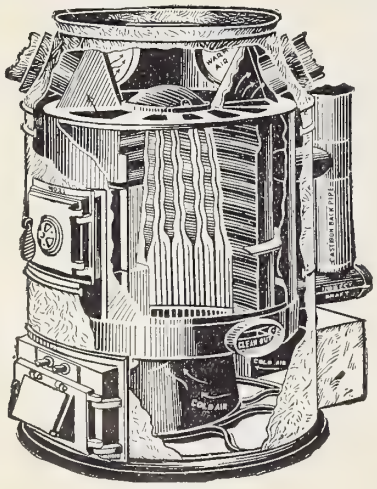
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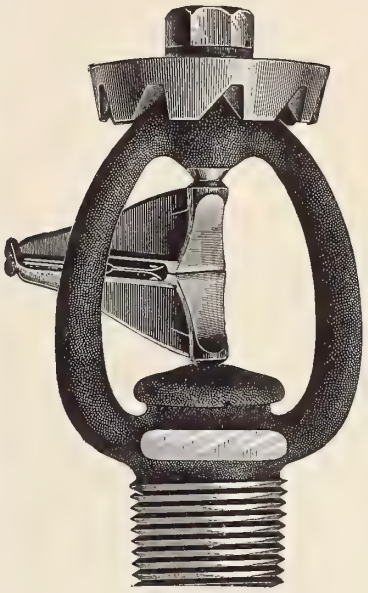
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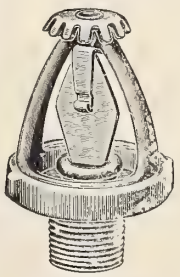
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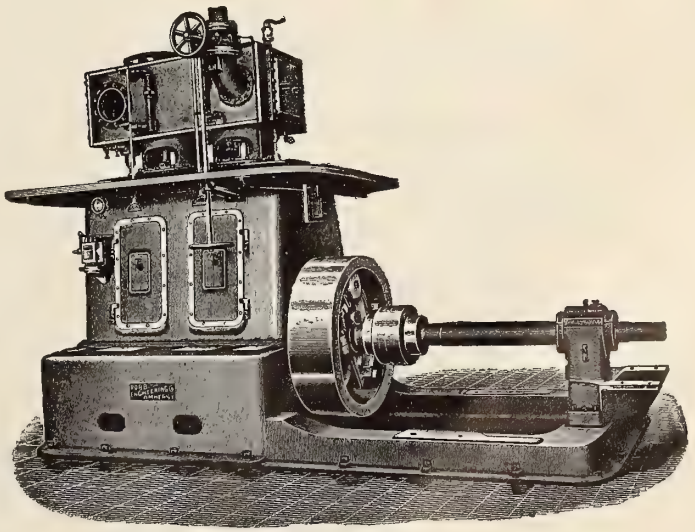
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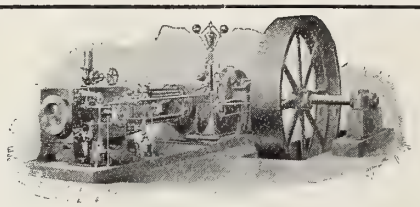
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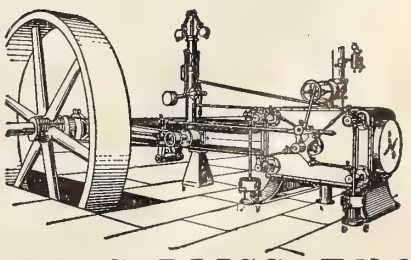
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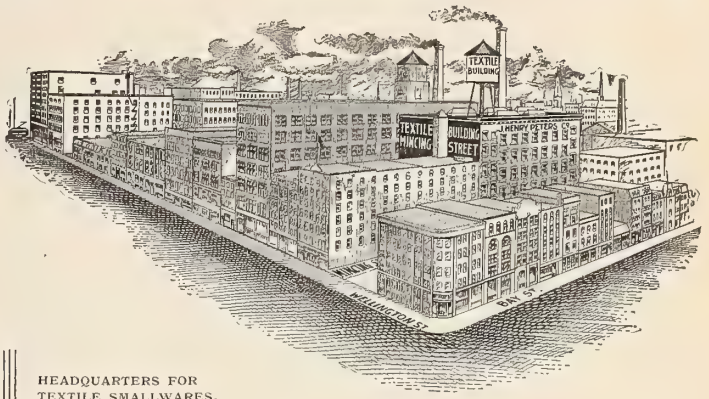
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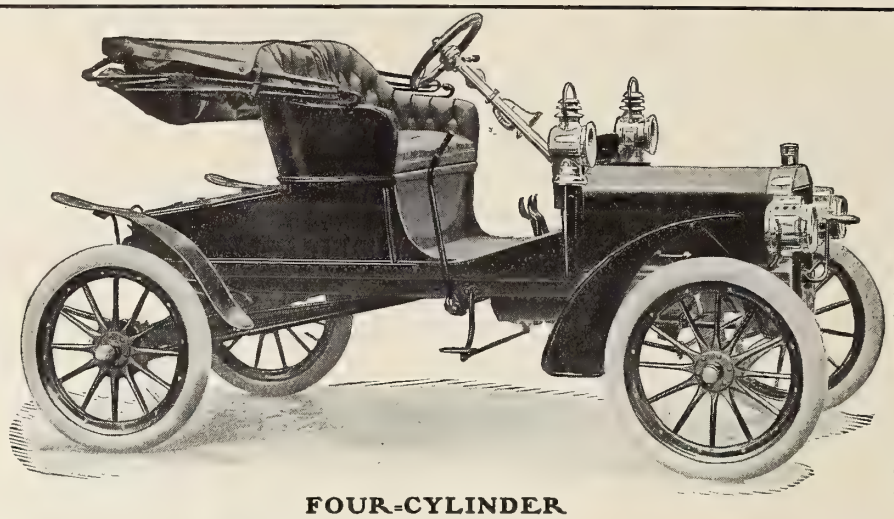
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EXECUTIVE COUNCIL

DECEMBER MEETING.

A meeting of the Executive Council of the Canadian Manufacturers' Association was held in the Board Room of the Board of Trade Building, Toronto, on Dec. 20th, at 2 p. m.

The President, Mr. H. Cockshutt, Brantford was in the chair and other members present were: Messrs. C. C. Ballantyne, Montreal; G. Frank Beer, Toronto; C. Bermingham, Kingston; H. Bertram, Dundas; George Booth, Toronto; George Brigden, Toronto; P. H. Burton, Toronto; J. C. Casavant, St. Hyacinthe; J. A. Coulter, Toronto; J. W. Cowan, Toronto; John Dick, Toronto; Geo. E. Drummond, Montreal; J. F. Ellis, Toronto; Thos. Findley, Toronto; H. W. Fleury, Aurora; D. J. Fraser, St. Johns, Que.; Ed. Freyseng, Toronto; W. K. George, Toronto; Geo. Gillies, Toronto; Jas. Goldie, Guelph; R. S. Gourlay, Toronto; Lloyd Harris, Brantford; Sam. Harris, Toronto; E. G. Henderson, Windsor; J. H. Housser, Toronto; J. J. McGill, Montreal; R. McLaughlin, Oshawa; W. K. McNaught, Toronto; J. B. MacLean, Toronto; Hugh MacLean, Winnipeg; T. F. Matthews, Peterboro; D. Murphy, Ottawa; J. P. Murray, Toronto; H. G. Nicholls, Toronto; W. C. Phillips, Toronto; J. A. Publow, Hamilton; John Ransford, London; Thos Roden, Toronto; A. S. Rogers, Toronto; Hon. J. D. Rolland, Montreal; F. A. Rolph, Jr., Toronto; Alex. Saunders, Goderich; Louis Simpson, Valleyfield; H. Stroud, Paris; A. W. Thomas, Toronto; R. L. Torrance, Guelph; C. H. Waterous, Brantford; Geo. W. Watts, Toronto; F. H. Whitton, Hamilton; S. M. Wickett, Toronto; and Dan Wilson, Collingwood.

Minutes of meeting held in November, as published in "Industrial Canada," were taken as read.

Communications expressing regret at being unable to be present at the meeting were presented from Messrs. W. B. Tindall, Toronto; Geo. E. Amyot, Quebec; Jas. Pender, St. John; R. C. Wilkins, Montreal; Wm. Stone, Toronto; Robt. Munro, Montreal; Jas. Davidson, Montreal; J. S. N. Dougall, Montreal; Geo. Sweet, Hamilton; J. M. Sinclair, Toronto.

REPORTS OF OFFICERS AND COMMITTEES.

President's Report.

The President referred briefly to the tariff now before Parliament, and regretted that the same was not designed to develop the manufacturing industries of the country. He also outlined other matters which would be dealt with in the reports to be presented to the meeting.

Treasurer's Report.

The financial statement presented by the Treasurer, Mr. George Booth, showed the financial position of the Association to be in a satisfactory condition. The report was adopted on motion of Mr. Booth, seconded by Mr. Ballantyne.

Secretary's Report.

The Secretary verbally reported on the dissatisfaction of a large majority of the members with the new tariff. As a consequence some forty meetings had been held in Toronto and Montreal within the past two weeks.

The reports to be presented to the Council were referred to as the most important that had been considered during the past year.

He impressed on the members present the importance of having a large and representative meeting of the Council at the January meeting, which would be held in Montreal.

He stated that meetings of the Quebec, Montreal, Nova Scotia and Toronto Branches had been held during the month.

Owing to the long agenda the reports of the Montreal and Toronto branches were formally received without being read. A resolution from the Nova Scotia Branch re. shipbuilding was read and referred to the Tariff Committee for consideration.

Favor Steel Shipbuilding.

The resolution is as follows:

Whereas, the Nova Scotia Branch of the Canadian Manufacturers Association learns that various firms and companies in Canada interested in domestic shipbuilding have adopted $6.00 per ton as the amount of bonus required to develop the business in order to meet the demand of our coastwise and inland carrying trade,

And Whereas, such proposed bonus being less than a ten per cent. protection, is much smaller than that allowed to other manufacturing industries in Canada,

Therefore Resolved, That this Branch cordially approves of the granting of the same;

Further Resolved, That copies of this resolution be transmitted to the Minister of Finance, the members for Halifax, and the Canadian Manufacturers' Association, Toronto.

FINANCE.

The report recommended the payment of the monthly accounts of the Association.

It further stated that arrangements for furnishing the new offices were complete, and that the offices would be occupied by the first of January.

The Committee reported the resignation of Mr. Stewart, and submitted the following resolution:

"That the resignation of J. F. M. Stewart as Secretary of the Association be accepted, and that the Finance Committee be authorized to procure a suitable souvenir in recognition of his valuable services to the Association, and the Committee further recommend that the position of general Secretary be offered to the present Assistant-Secretary, Mr. G. M. Murray. This resignation and appointment to take effect at a date to be arranged by the Finance Committee.

On motion of Mr. Harris, seconded by Mr. Booth, the report was adopted.

PARLIAMENTARY.

This report was presented by the chairman, Mr. A. S. Rogers, and made the following recommendations:

Saturday Half Holiday.

A communication was presented from Mr. S. M. Wickett, suggesting that the Association move in the direction of having Saturday afternoon made a universal holiday. This letter pointed out that a large number of factories

closed down Saturday afternoon at the present time, and that the practice was growing, and likely the half holiday would be universal whether the manufacturers took action or not, and that it might be a good policy to adopt the principle.

The Committee considered that it was unwise to take action for the reason that at the present time the half holiday was more particularly confined to the larger centres, and further the half holiday is adapted in some trades and not in others, and it could hardly be dealt with as a general question, as it would injure many manufacturers.

Metallic Roofing vs. Union.

Mr. Thorn advised the Committee of the position of the suit between the Metallic Roofing Co., and the Toronto Local No. 30 Sheet Metal Workers' International Alliance, which has been carried through different courts for the past three years, and which, in all probability, will be carried to the Privy Council before it is finally settled. The Metallic Roofing Co. has, up to the present time, been successful, and has secured judgment together with an injunction. The suit has passed the point at which it is of particular value to the Metallic Roofing Co. to continue the same. However, in view of its importance to Canadian industries, Mr. Thorn stated that the suit would be fought to the end. The Committee impressed on Mr. Thorn the importance of manufacturers and employers generally being kept posted as to the position of this matter, and asked Mr. Thorn to prepare an account of the suit suitable for publishing in "Industrial Canada."

Mr. Thorn also forwarded a resolution passed by the Labor Congress to the effect that, as the Canadian Manufacturers' Association are about to establish a Labor Bureau in Great Britain, Labor Unions should take steps to counteract this influence.

Ontario Assessment Act.

The replies received in response to the circular sent out to the Ontario members of the Association asking for their views on the new Ontario Assessment Act were in accord with the decisions arrived at by last year's Committee, and it was decided to have those of most importance put in the form of a bill and presented to the Government.

Incorporated Company Franchise.

The Chairman reported that, with the Secretary, he had interviewed the Honorable, the Provincial Secretary, pointing out that incorporated companies at present did not have a vote in municipal or other elections or on money by-laws, and that in view of the large amount of taxes they were called on to pay, the situation was not equitable. The Provincial Secretary stated that action to remedy this would have his support, and asked to have the facts presented to him in writing.

Emigration Laws.

The Chairman reported that efforts had been made to have the amendment to the Merchants' Shipping Act introduced into the British Parliament amended so as to cover parties making fraudulent misrepresentation to deter parties from leaving England, equally liable with those using false representations to induce. The necessity of this amendment had been strongly pressed on the Minister of Labor who, in turn, communicated with the British Parliament and urged that the amendment, as suggested, be adopted. It is understood that the British Parliament, on principle, have objected to the introduction of any legislation which would in any way interfere with any one who endeavored to keep Britishers at home, claiming that such legislation would be against the best interests of the country. It is not expected that any changes will be made in the act.

Amendment to Conciliation Act.

A bill entitled as above has been introduced into the Senate by the Hon. Senator McMullen, the intention being to prevent anyone but a citizen of Canada and a British subject, acting on conciliation or arbitration boards under the Dominion Act of 1900, and also to prevent any alien from interfering in any way between employers and workmen.

The Committee recommend that the Council express its hearty approval of this measure.

Eight Hour Bill.

A bill to provide for an eight hour day has been introduced into Parliament by Mr. Verville, M.P., Montreal. The Committee believe that the principle herein, which limits the time shops should operate or men should work, is wrong and recommend that the Association express to the Government its disapproval of the legislation.

Ontario Companies Act.

A very important act, the Ontario Companies Act, which is a consolidation of the present Ontario Acts having to do with the incorporation of general companies, timber slides, wharves, exhibition buildings, mining companies, gas and water companies, cheese companies, co-operative associations, cemetery companies and other subjects covering in all twenty-one acts, has been published by the Ontario Government and suggestions invited. The Committee have secured copies of this and the same will be gone into in detail at an early meeting. The act introduced by the Honorable, the Minister of Labor covering disputes between the operators and employees of coal mines will also be considered at this meeting.

The Committee unanimously decided to ask Mr. J. O. Thorn to act as a member of the Parliamentary Committee, which request Mr. Thorn complied with.

The different paragraphs in this report were fully discussed.

Mr. S. M. Wickett stated that he had been asked by several manufacturers to bring the question of Saturday half holiday before the Committee, and that while he recognized the difficulties which presented themselves to the Parliamentary Committee, still he was of the opinion that uniformity throughout the country would put manufacturers in a better position. As things were at the present time those who worked all Saturday afternoon had considerable advantage over those who found it necessary to close.

The report as given was adopted on motion of Mr. Rogers.

BRITISH OFFICE.

The report of the British Office Committee was presented by Mr. Geo. W. Watts, as follows:

Representative in Great Britain.

For the position of the Association's representative in Great Britain, which appointment has been under consideration since the Annual Meeting, twenty-six names were considered.

The Committee was of the opinion that at the present time it was of more importance to the members of the As-

sociation to have a representative in Great Britain who would be thoroughly qualified and equipped to supply the members of the Association with skilled help, rather than to appoint such a man as would act as the official representative of the Association in Great Britain for all purposes. From the financial aspect the Committee believed that the expense of maintaining an official representative in Great Britain would be larger than the finances of the Association would warrant. The Committee, therefore, concluded that they should endeavor to secure a man specially qualified to supply skilled labor.

The Committee recommended Mr. Louis Leopold, Canadian Labor Bureau, London, Eng., for the position, and gave details of the proposed agreement with him.

The report was adopted.

COMMERCIAL INTELLIGENCE.

In the absence of the Chairman the report was read by the Secretary, as follows:

New Zealand Commissioner.

Letters were presented from the British Columbia Secretary of the Association to the effect that the New Zealand Trade Commissioner, Mr. Graham Gow, was in Vancouver and was being looked after by the officers of the British Columbia Branch. Mr. Gow will be given similar attention by the officers of the Manitoba Branch on his arrival in Winnipeg.

Dinner to Mr. Gow and Mr. Grigg.

The Committee recommended that in view of the importance of the investigations being made by Mr. Gow, the New Zealand Trade Commissioner and Mr. Richard Grigg, the Commissioner from the British Board of Trade, that a complimentary business dinner should be tendered to them in Toronto on a date to suit their convenience, but preferably on the day of an Executive Council meeting.

Trade and Navigation Returns.

A communication has been received from the Department of Customs, Ottawa, to the effect that representations made by the Association last year, suggesting changes in the statistical classification of imported goods would receive attention when new schedules were being prepared.

Parcel Post.

A communication was presented from Mr. E. G. Henderson, Windsor, calling attention to the high charges made by express companies and the Post Office for the transmission of small parcels. Newspaper clippings were presented to the effect that the Post Office Department have now under consideration the inauguration of a new system for the delivery of parcels. The Committee have the assurance that as soon as definite regulations covering this system are decided upon that they will be favored with copies, and the matter will be dealt with by the Committee when this information is to hand.

Australian Tariff.

In response to numerous enquiries regarding the new Australian tariff, the subject was investigated by the Committee, with the result that conditions were found to be exactly the same as before the proposed tariff was introduced, and that all duties collected under the proposed tariff would be refunded.

New Canadian Industries.

The Executive Council at its October meeting asked the Committee to suggest a policy for the Association to adopt when requests were received from foreign firms seeking information about Canada or Canadian Centres. The Committee will recommend that no definite line of policy be adopted, but that generally speaking the work is not of a nature that the Association should undertake, and that parties making enquiries should be given no information except of a public or general nature.

Other subjects which the Committee have before them, and which will be discussed at later meetings, are the International Agricultural Institute, The Pan-American Republic Congress, the Metric System, and Commercial Representation abroad.

Col. J. B. MacLean asked whether or not the Committee favored the change suggested by the Post Office Department for carrying parcels by post at cheaper rates than at present, and stated that there would be vigorous opposition to this change from storekeepers throughout the country.

The Secretary explained that the report did not make any recommendation, but that the Committee would consider the new regulations as soon as they were received, and would likely have something definite to propose to the Council.

The President, Mr. Cockshutt, spoke with reference to the finding of the Committee re. the Australian tariff, and suggested that the rebates collected under the proposed tariff did not apply to binders the same as other articles, owing to an increased price for valuation purposes. It was understood that the Committee would look further into this matter.

The report was adopted.

RAILWAY AND TRANSPORTATION.

The report was presented by the Chairman, Mr. J. H. Housser.

The report in part was as follows: The Committee begs to report that the conference with regard to railway traffic forms was not called by the Railway Commission owing to the railways being unready. Advices from the Commission state that a meeting will be held on the 12th or 13th at which a definite date will be set for the submission of the revised form.

In response to communications from the Transportation Department, the Department of Railways and Canals have decided to adopt demurrage rules approved by the Railway Commission in place of the former rules enforced by the Canadian Freight Association on the Intercolonial Railway.

The manager of the Department brought to the attention of the Committee a notice by the Grand Trunk Railway for amendment or repeal of clause 3 of their charter, which requires the carriage of third-class passengers at 2 cents a mile and the running of third-class carriages on their trains. The matter was discussed by the Committee, but no action decided upon.

A communication from the Hudson Bay Knitting Company calling attention to pilferage of goods in transit was under consideration, but the Committee could not suggest any means by which the Association could bring about an improvement in the present conditions.

The proposed revision of freight rates to overcome discrimination in favor of the United States was reported upon by the Manager of the Department, who has spent a considerable portion of the month in going over the scheme and checking the rate tables. A conference of an informal nature with the railway companies is expected to take place very shortly. In the meantime a circular has been sent by direction of the Committee to all of the members, asking for information as to the raw materials which they import;

from the United States to provide against any advance in freight rates thereon. The Committee is hopeful that the result of the negotiations will be substantial reductions in freight rates in the eastern portion of Canada, otherwise it is the opinion of the Committee that it would be unwise to disturb the present rate situation.

The report of the Committee was adopted on motion of Mr. J. H. Housser, seconded by Mr. R. L. Torrance.

RECEPTION AND MEMBERSHIP.

In the absence of Mr. C. S. Meek, the report of the Reception and Membership Committee was presented by the Secretary, and on motion of Mr. R. L. Torrance, seconded by Mr. Alex. Saunders, was adopted.

The report is as follows:

Membership Campaign.

The Secretary reported that the Nova Scotia, Montreal, Toronto and British Columbia Branches had each appointed special Membership Committees, and would at once undertake to secure new members. A general plan for keeping the Reception and Membership Committee in touch with different manufacturing centres was discussed and recommendations will be made at an early date.

New Members.

The Committee is strongly of the opinion that the greatest care should be exercised in the admission of new members, and that the membership should be safeguarded in the interests of bona fide manufacturers, and that no applications should be recommended until conclusive evidence is presented to show that the applicant is eligible.

In order to secure evidence as to the eligibility of an applicant the Committee decided that a series of questions concerning each applicant should be asked one or more members of the Association likely to know the parties making the application, the acceptance of the application to depend on the answers received.

The questions were as follows:

1. Are they manufacturers?
2. What do they manufacture?
3. What goods (if any) do they handle that they do not manufacture?
4. Is the important part of their business manufacturing, contracting, retailing or importing?
5. What firms manufacture similar lines.

The Committee would recommend also that the membership application form be amended by adding thereto the following words, "being a bona fide manufacturer in Canada of the articles enumerated below," and asking also for the manufacturing address as well as the office address of the applicant.

The Committee authorized the sending out of a circular letter to non-members dealing with the work of the Commercial Intelligence Committee.

Eighteen applications for membership were recommended for acceptance. These are published in another column.

TARIFF.

In the absence of the Chairman of the Tariff Committee, Mr. W. K. George, the report was presented by Mr. W. K. McNaught.

The report was as follows:

The Tariff Committee have held three meetings during the past month.

It is the regret of the Committee that the tariff now before Parliament shows that the Tariff Commission and the Government have practically disregarded the important and necessary recommendations that were made to it by manufacturers in all parts of the country.

The Committee handed an official statement to the press as follows:

> "Generally speaking the new tariff is a disappointment. The general tariff is practically the same as the old tariff and will not encourage the establishment of new industries. The recommendations made by different manufacturers regarding their individual lines of industry have seemingly been disregarded.
>
> "The general tariff is little or no improvement as a protection against the United States, while on the other hand, the intermediate tariff, if it is made applicable to the United States, would be disastrous to many industries. The various manufacturing sections of the Association have now under consideration the specific items."

Efforts were promptly taken to point out to the Government the general dissatisfaction that existed, and representations have been made to the Government by Messrs. H. Cockshutt, W. K. George, Lloyd Harris, C. C. Ballantyne, Geo. E. Drummond, W. K. McNaught, Geo. W. Watts, Hon. J. D. Rolland and Robt. Munro, all members of the Tariff Committee.

In addition to this the Association has lent its services to individual industries wherever this was possible, and would report that representations have been made to the Government by at least the following lines of industry: Rubber, leather goods, paper, paints and oils, manufacturing grocers, boots and shoes, crucible steel wire, iron and steel, glass, book binders, spectacles, corks, furniture, brass, lithographers, axes and scythes, shovels, woolen cloth, knitted goods, carpets, cottons, threshing machinery, hats, cut glass, watches, silverware, sugar, windmills, leather, gloves, silk, salt and bridges.

The Committee made recommendations for further action which were approved.

The report as presented was adopted.

INSURANCE.

This report was presented by Mr. P. H. Burton, and on his motion, seconded by Mr. Lloyd Harris, was adopted as follows:

During the month the routine office work of the Department has been somewhat hampered by the illness of the Manager, and by a stay of nearly two weeks in Montreal representing the interests of several of our members who suffered loss by the two large fires that occurred in that city on the 3d and 9th inst. The two disasters referred to in Montreal have clearly shown the importance of the work that may be performed by the Department in the adjustment of fire losses. Fortunately for some months past there has been an immunity of loss on risks of our members, thus maintaining the singular experience referred to in our annual report, but in the two fires referred to losses were adjusted on five separate interests for three firms who sustained losses to the extent of $40,193; in two cases the firms suffered to some extent by the application of the Co-Insurance clause, and the experience of the Department in these and other cases evidences that the conditions of this clause are not clearly understood or observed by insurers.

One loss is still in process of adjustment, and will probably require a further visit to Montreal ere it is finally settled. The amount of the claim in this particular case will

be in the neighborhood of $10,000, and in the adjustment, complications have arisen which will require the careful attention of the Department's officer.

It is worthy of note that in only one instance had the policies of insurance been previously submitted to the Department for examination; that the policies in the instance referred to were then re-written and that the test of the fire had found them in order with all conditions properly observed, and the interest of the assured completely protected.

We are pleased to record that the members who have been assisted in respect to the matters just referred to have expressed cordial appreciation of the work of the Department and of the reasonableness of the accounts in accordance with the established scale of charges.

The bills for the incorporation of the two proposed Mutual Companies are now before Parliament, but at the suggestion of the Minister of Finance the deputations appointed to wait upon the Government in regard thereto, and also in respect to the other matters that were endorsed by the Annual Convention, will not present their views until later in the session.

INDUSTRIAL CANADA.

Mr. Geo. Brigden, Chairman of the Committee, presented the "Industrial Canada" report, which showed that the financial position of the paper for the first four months was satisfactory.

It was reported also that negotiations were under way for re-letting the contract for printing the paper for the coming year, and that the Committee had not as yet decided whether or not it would be advisable to change the present size of the paper to magazine size.

The meeting adjourned at 4.10.

MONTREAL BRANCH.

The Montreal Branch reported another month of activity. In addition to the regular work a large number of meetings of the different trades and sections were held to consider the effect of the new Tariff. In cases where grievances were found to exist prompt action was taken to lay these before the Government, and full reports have been sent to the Tariff Committee.

The regular monthly meeting of the Montreal Executive was held on December 13th, when a unanimous resolution was passed approving of the action taken by the British Office Committee in appointing a special Labor Agent in London, but also urging that the plans outlined at the Winnipeg Convention for the appointment of a general representative in London be carried into effect at as early a date as possible.

An interim report upon the Ballantyne Banquet was presented, showing a small surplus on hand after all bills had been paid.

The announcement that the Executive Council of the Association would hold its January meeting in Montreal was received with great favor, and preparations for it are

TORONTO BRANCH.

During the past month the Executive Committee of the Toronto Branch have held three meetings, at which matters of considerable local importance have been dealt with.

Building By-Law.

A special committee was appointed to go through the new building by-law to see that the interests of manufacturers were fully protected therein. This committee is now endeavoring to bring about a meeting of the representatives of a number of organizations in the city with a view to having the measure redrafted.

Ashbridge's Bay

After a personal examination of the Ashbridge's Bay district, at which the proposals of Commissioner Thompson were fully set forth, your committee passed a resolution favoring an aggressive policy of municipal ownership for that quarter, advocating that it be reserved as far as practicable for manufacturing sites, and that the city should construct and maintain possession of all railway sidings into and through same. The views of the Branch as contained in this resolution have been laid before the Mayor and Board of Control.

Subsequently a luncheon was arranged by the Dinners Committee for the further discussion of this question, and speakers were heard from the City Hall, as well as from the Riverdale Business Men's Association and the manufacturers. It is the intention of the Committee to follow the matter up, and keep it prominently before the public until some action is taken.

Cheap Power.

Another resolution passed by the Branch, requesting the Mayor and Board of Control to give the people an opportunity on January 1st of saying whether or not they wanted cheap power on the lines laid down by the Hydro-Electric Power Commission has been productive of results, the Board having promised to put the matter to a vote.

Harbor Improvement.

The Branch was represented at a public meeting called to consider the advisability of making representations to the Government in regard to the necessity of improving the entrances to the harbor and providing adequate life-saving appliances, and was afterwards represented on a deputation which waited on Sir Wilfrid Laurier and the Minister of Marine and Fisheries in this connection. In order that the matter may not be lost sight of, a Harbor Improvement Committee has been appointed to bring in a report on the subject and see that the Government also has a report prepared by a competent engineer.

Homes for Workingmen

The sub-committee on homes for workingmen have been quietly working on their proposition, and hope to be able to lay it before a general meeting of the Branch to be called early in January. The function will probably take the form of an evening supper, to be followed by an illustrated lecture. A large number of prominent men have been seen, and have promised to serve on the provisional board of directors for the company it is expected to form.

Luncheons.

Reference has already been made to one of the luncheons held under the auspices of the Branch. Another one was held some two weeks earlier to discuss the Esplanade Viaduct. The Branch Executive consider that their Dinner Committee are to be congratulated on the success of their luncheons. They are steadily increasing in interest and popularity, and are doing a good work in focusing public attention on questions of importance to the municipality.

NEW MEMBERS.

Passed by the Executive Council on December 20th, 1906.

BASSEMER, ONT.

The Mineral Range Iron Mining Co., Limited.—Iron ore mining.

BELLEVILLE, ONT.

Belleville Pottery Co.—Stoneware and potteryware.

LONDON, ONT.

The Murray Shoe Co., Ltd.—Boots and Shoes.

LONDONDERRY, N. S.

Londonderry Iron and Mining Co., Ltd.—Pig Iron.

MONTREAL.

The Jeffrey Mfg. Co.—Elevating and Conveying Machinery, Crushing, Screening and Power Transmission Machinery, Coal Mining Machinery.

The Mortimer Co., Ltd.—(Samuel W. Tilden, second member.)

National Drug and Chemical Co., of Canada, Ltd.—Chemical and Pharmaceutical Products.

National Drug and Chemical Co., of Canada, Ltd.—(C. W. Tinling, second member.)

OAKVILLE, ONT.

Oakville Basket Co.—Baskets.

PARKHILL, ONT.

H. C. Baird, Son & Co., Ltd.—Brick and Tile Machinery.

PETROLIA, ONT.

J. & J. Kerr Co., Ltd.—Driller's Supplies, Planing Mill, Fire Brick, Lime, Tanks, Wheels, Conductors, Drill Poles, etc.

TORONTO.

Canadian Portland Cement Co., Ltd.—(M. J. Haney, second member.)

Helena Costume Co., Ltd.—Cloaks, Suits and Costumes.

The Imrie Printing Co., Ltd.—Catalogues, Books and General Printer's matter..

TORONTO JUNCTION, ONT.

Livingston & Scott.—Ladies' Dress Skirts.

VICTORIA ROAD, ONT.

Raven Lake Portland Cement Co., Ltd.—Portland Cement.

WINNIPEG, MAN.

National Mfg. Co., Ltd.—Cream Separators, Stoves and Scales.

ARE THEY STIFF SENTENCES?

Under the above heading the "Belleville Intelligencer" discusses the recent conviction of riotous strikers and strike sympathisers as follows:—

Four of the rioters in Hamilton arising out of the late strike in that city, have been before Judge Snider, tried and found guilty of destroying property, doing bodily injury to innocent men and assaulting officers of the law in the discharge of their duty, and for disregarding the Riot Act. For these unlawful acts the Judge has sentenced them to imprisonment, one for eighteen months, two for one year each, and one for two months. These the "Hamilton Times" declares, in large type, to be "Stiff Sentences." Are they?

The man sentenced to 18 months' imprisonment, assaulted a police officer, persisted in driving through the ranks of the soldiers, who were present to protect the lives of non-union men, and assaulted Col. Denison. No peace-loving subject will say he does not deserve 18 months in jail.

Two others, who were sentenced to 12 months, were found guilty of "assaulting a police officer, rioting and inciting others to commit an assault."

The fourth offender was a Greek, and was treated more leniently by the Judge, though found guilty of striking an officer in the discharge of his duty, on the ground of his being a foreigner not knowing the law. This offender got only two months' imprisonment.

Those who abhor the rioting violent assaults, resulting in some cases, in death, and destruction of property which in too many cases accompany strikes, will not denounce these sentences as too "stiff." On the contrary, they will commend the Judge for having taught these men, and others who sympathize with them, that such acts cannot be allowed or permitted in this country with impunity.

RECLAMATION OF MARSH.

The discussion on current topics of civic interest at the Toronto Branch are growing in popularity. On December 5th, the most largely attended meeting yet held took place at McConkey's, and those present, besides partaking of a commendable lunch, listened to a lucid explanation of the possibilities of Ashbridge's Bay in the scheme for the betterment of industrial conditions in Toronto. The guests of the Branch were Mayor Coatsworth, Mr. M. J. Haney, City Engineer Rust, Assistant Commissioner Foreman, Commissioner of Industries Thompson, and Mr. A. R. Clark, of the Riverdale Improvement Association. The speakers were unanimous in their expressions of the urgency of ground room for manufacturers where railway and water facilities would alike be available. Mr. Haney, who had a blue print of the district on exhibition, outlined a general scheme for reclamation of the marsh and straightening of the Don, which would give the city five miles of wharfage. He urged the appointment of a commission of five whose duty it would be to carry out the necessary improvements.

ALIEN LABOR LEADERS.

"A very ugly feature of the Hamilton affair," says Bystander in the "Weekly Sun," "is the appearance as the chief instigator and leader of the riot of an American agitator under the orders of a chief agitator on the other side of the line. What right have these men to be throwing their firebrands into a home of Canadian industry and filling with lawlessness and outrage a Canadian city? They are members of the Labor party in the United States, which upholds the Alien Labor law and excludes the Canadian workmen from the great labor markets of this continent. Our unhappy labor disputes have given birth to a set of agitators who subsist by industrial war, with the leadership of which, if they can combine political influence and votes, they may look to political advancement. About the trouble and loss they may bring on Canada such men care not a straw."

Discussing the same incident at another time, Mr. Smith says:—"The New York 'Sun' is reputed an enemy of England. It was an enemy, and a very bitter enemy of England, when the leading journal of England was, with no small peril to Canada, pouring its daily vial of wrath on the American Republic, then agonized by the civil war. But we have to thank the "Sun" for a hearty support of Canadian law and order against the incursion of the American Mr. Fay, backed by his chief in the United States. It is too bad that foreigners who voted and uphold the Alien Labor Law against our labor should be coming here or sending their emissaries to organize strife among us. Their appeal to the President for support in their aggression was sure to be disregarded."

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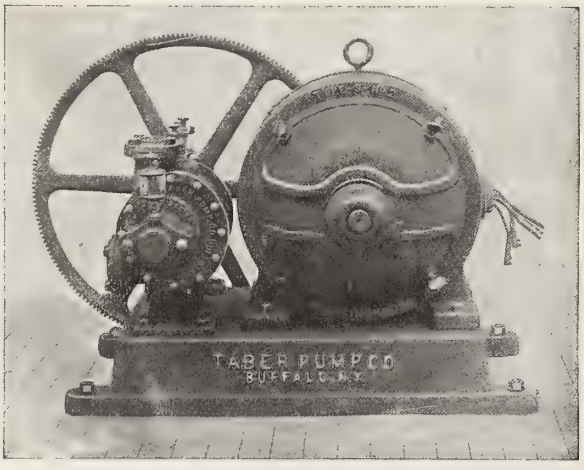
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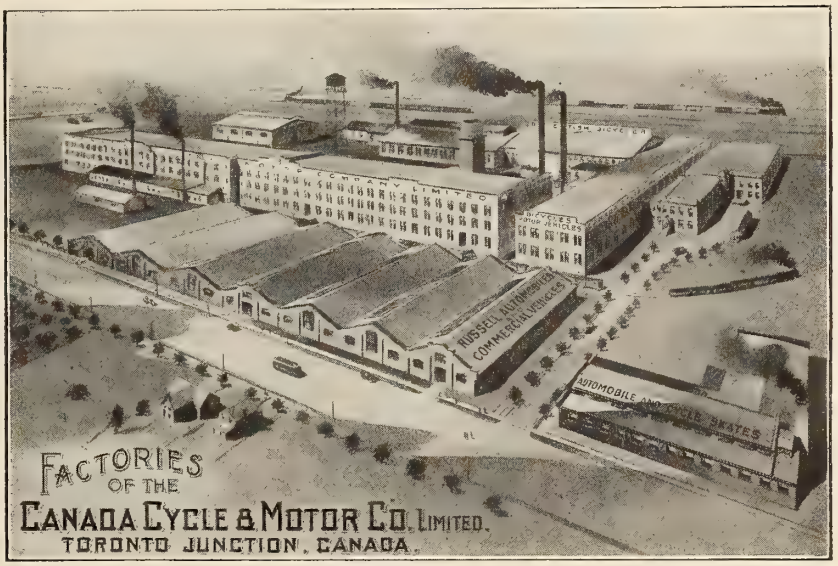
"IT KNOWS THE ROAD"

BACKED UP BY A FACTORY—

Near enough to take care of you.

Equipped to look after you.

Determined to please you.



Our 1907 Models are LARGER, STRONGER, FASTER, QUIETER and RICHER than ever.

MODEL D. 18 H.P. 2-Cylinder Touring Car	$ 1,600
MODEL E. 25 H.P. 4-Cylinder Touring Car	2,500
MODEL F. 40 H.P. 4-Cylinder Touring Car	3,750

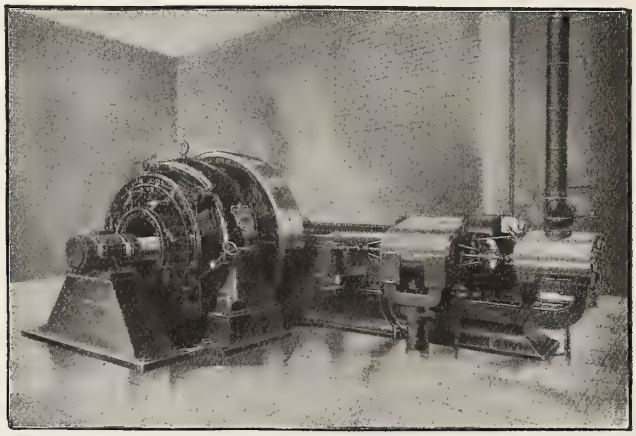
CANADA CYCLE & MOTOR CO., LTD., Toronto Junction, Canada.

BRANCHES—Winnipeg, Man. Vancouver B.C. Melbourne, Australia.

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SIDE CRANK IDEAL ENGINES



Specially adapted for Direct Connection. Perfection in High Speed Engine Design. Send for Bulletin No. 6.

THE GOLDIE & McCULLOCH CO., LIMITED

GALT, - - ONTARIO, - - CANADA

Western Branch: 248 McDERMOTT AVENUE, WINNIPEG, MAN.

QUEBEC AGENTS—ROSS & GREIG, MONTREAL, QUE.

WE MAKE Wheelock Engines, Corliss Engines, Ideal High Speed Engines, Boilers, Steam and Power Pumps, Flour Mill Machinery, Oatmeal Mill Machinery, Gyrators, Emery Choppers, Wood Working Machinery, Shingle Machinery, Heading Machinery, Wood Rim Split Pulleys, Iron Pulleys, Shafting, Hangers, Friction Clutch Couplings, Safe and Vault Doors. **Send for Catalogue and Prices.**

ROOF YOUR BUILDINGS



WITH "EASTLAKE" METALLIC SHINGLES

(Made in Canada 21 Years)

RUST - FIRE - LIGHTNING AND STORM PROOF

Warranted made of better material, more accurately and scientifically constructed, will last longer and cost less for labor in applying than any other metal shingles

We are Manufacturers and Exporters of all reliable kinds of

SHEET METAL BUILDING MATERIALS

NO CHEAP TRASH

CAREFUL, THOROUGH AND PROMPT ATTENTION TO ALL ENQUIRIES

PROMPT SHIPMENT & RIGHT PRICES - CATALOGUE UPON REQUEST

THE METALLIC ROOFING CO.

OF CANADA, LIMITED,

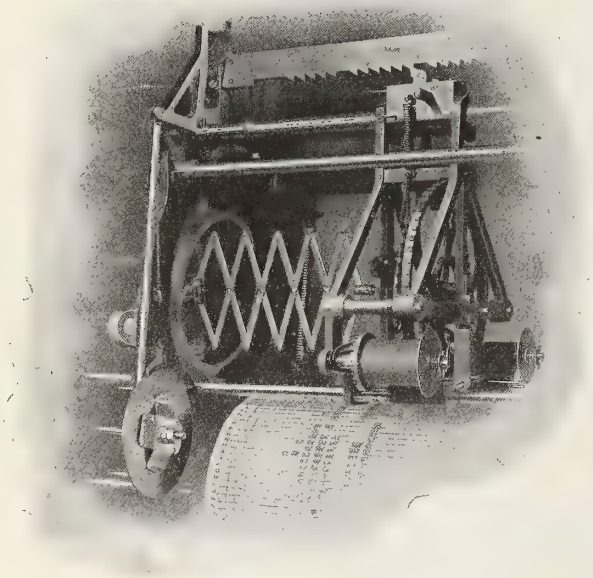
MANUFACTURERS

TORONTO AND WINNIPEG - CANADA

"GLOBE"

"IT PAYS TO KNOW, YOU KNOW TO PAY"

A time recorder that will automatically perform all the time-keeping, except the paying of the men, and gives a complete weekly pay-roll without copying.



Almost human—and much more accurate than any human time-keeper. They tell to a minute, and do it in black and white.
Our new catalogue now ready, ask for one.

UNIVERSAL SYSTEMS

LIMITED

8-10 Adelaide St. West
TORONTO, ONT.

14 Bank of Ottawa Building
MONTREAL, QUE.

Manitoba Agents: F. H. BRYDGES & SONS, WINNIPEG

TAKING INVENTORY

Our Inventory System allows stock to be taken in all Departments simultaneously. Any desired number of clerks may be put on the work of pricing, extending, etc. The record collated when complete and filed on Permanent Binder.

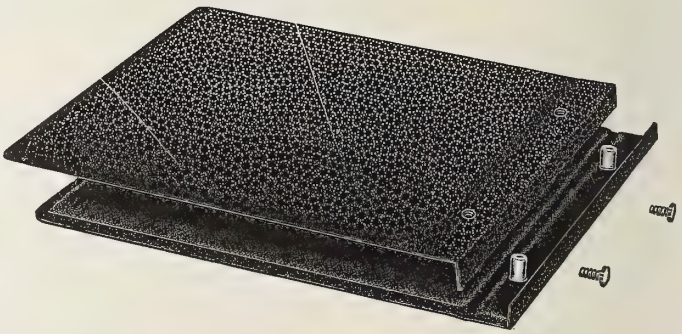
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1000 Inventory Sheets
1 Binder
3 Holders

$10.85

NOW IS THE TIME TO ORDER

Perpetuity Catalogues



The latest designs and information concerning loose leaf catalogues.
We are prepared to handle your catalogue complete from start to finish.
We have an interesting plan, write us now about it.

UNIVERSAL SYSTEMS

LIMITED

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MONTREAL, QUE.



MANUFACTURERS!

WE WANT TO SELL YOU YOUR REQUIREMENTS IN

SHAFTING - HANGERS - PULLEYS

AND

POWER TRANSMISSION MACHINERY GENERALLY

on the basis of supplying promptly, strictly first-class goods, equal to any of the kind made anywhere, and at prices as low as any reputable makes can be offered for, and

OURS ARE ALL MADE IN CANADA

so there is no reasonable excuse for going past us

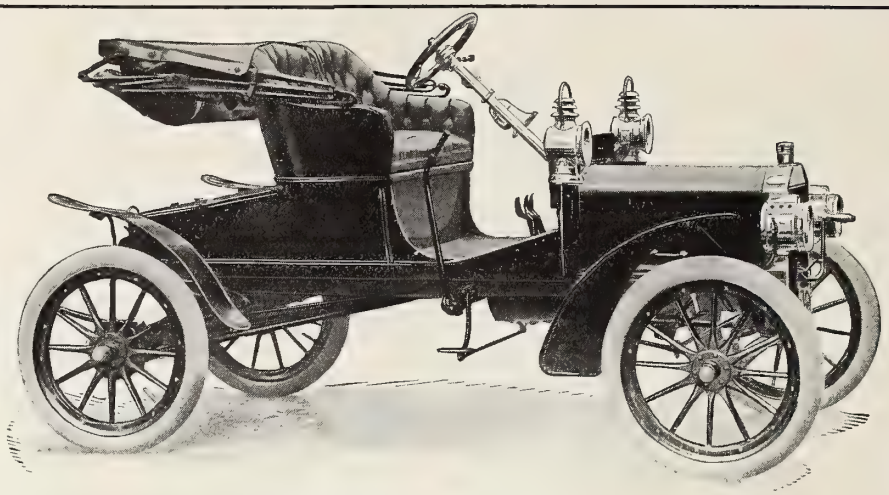
WRITE FOR OUR LISTS

DODGE MANUFACTURING CO.

TORONTO - - MONTREAL

Ford Model "N" Runabout

Four-cylinder, vertical, water cooled, direct drive, 15 h.p., weight 1,000 pounds, fitted with 3 inch double tube tires, $750. The price is for full equipment, including oil lamps, tail lamp, post horn and tools.



Ford Model "K"

Six-cylinder car, 40 h.p., will seat seven comfortably, $3,500.

Write for Catalogue describing each car in detail.

FOUR-CYLINDER

Ford $750 Runabout

The Sensation of the Automobile World.

The Quality of this car, as demonstrated in the hands of owners, has been a revelation to the automobile world. The many declarations that a car at this price could not be made strong enough to withstand rough usage on country roads, that its own power would be too great for it, has been disproved by the experience of actual owners.

In every Hill Climbing Contest in which this car has been a competitor, it has been the sensation of the event, making grades on the high gear that 40 and 50 h.p. cars labored up on second. At Denver and Rochester, N.Y., it "outdid" every competitor, defeating, outside of its own class, ten cars ranging from 22 to 40 h.p.

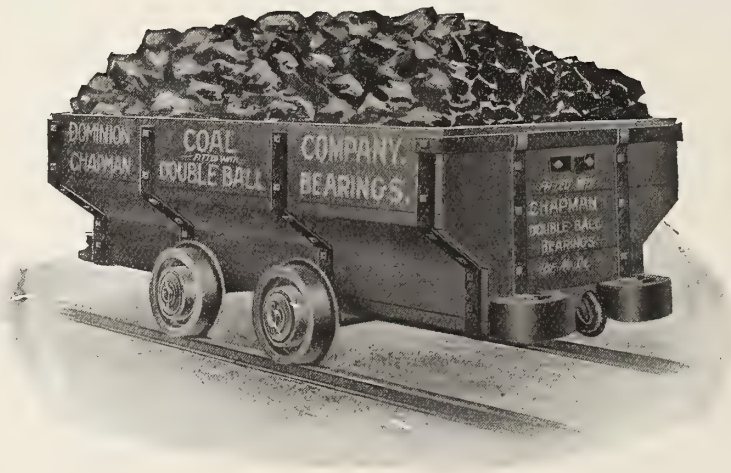
On the Race Track, on cross country tours and on endurance tests, it has simply out-classed them all and is yet to be defeated by any car of less than $1,000 or less than 22 h.p.

FORD MOTOR CO. OF CANADA LIMITED,
WALKERVILLE - ONTARIO

Chapman Double Ball Bearings

APPLIED TO

Coal
Ore
Slag
Charging **CARS**
Quarry
Marl
Shop
Foundry



SAVE

50 % Power to operate.

100 % Wear and Tear on Axles.

100' % Lubrication.

100 % Attention.

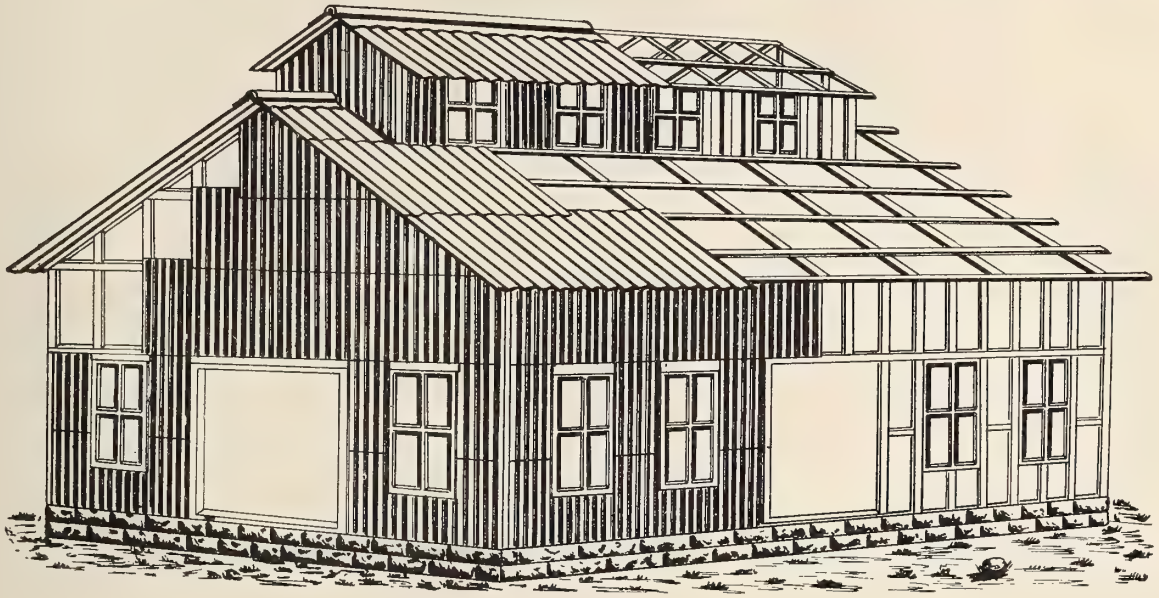
DESCRIBED IN BULLETIN NO. 9.

THE CHAPMAN DOUBLE BALL BEARING CO. OF CANADA, Limited

TORONTO, - CANADA.

CORRUGATED IRON

"Keeping Everlastingly at it Brings Success"



PEDLAR'S CORRUGATED IRON is made on a **38,000 lb. Press** (the only one in Canada), one corrugation at a time, and is guaranteed true and straight to size.

We carry a **600 TON STOCK** in **OSHAWA, MONTREAL, TORONTO, OTTAWA and LONDON,** and can ship ordinary requirements same day as order is received.

Made in 1 in., 2 in., or 2¾ in. Corrugation in sheets any length up to 10 feet, in 28—26—24—22—20—18 gauge, both painted or galvanized. This class of material is most suitable for fireproofing **BARNS, FACTORY, MILL,** and **WAREHOUSE BUILDINGS,** and is water and wind proof. Corrugated Ridges, Lead Washers, and Galvanized Nails carried in Stock.

Send Specification to your nearest office for Catalogues and Prices.

THE PEDLAR PEOPLE

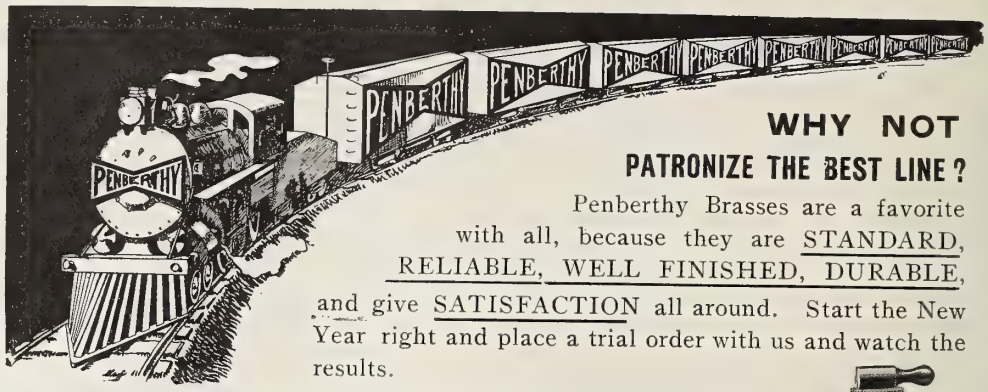
Montreal, Que.	Ottawa, Ont.	Toronto, Ont.	London, Ont.	Winnipeg, Man.	Vancouver, B.C.
767 Craig St.	423 Sussex St.	11 Colborne St.	69 Dundas St.	76 Lombard St.	615 Pender St.

Write your nearest Office—**HEAD OFFICE AND WORKS, OSHAWA, ONT.**

Largest Makers of Sheet Metal Building Material under the British Flag

PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY

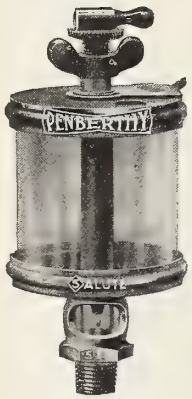
Have You Received Our NEW 1907 Catalog ?



WHY NOT PATRONIZE THE BEST LINE ?

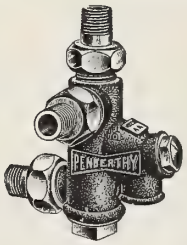
Penberthy Brasses are a favorite with all, because they are STANDARD, RELIABLE, WELL FINISHED, DURABLE, and give SATISFACTION all around. Start the New Year right and place a trial order with us and watch the results.

ONCE STOCKED - ALWAYS STOCKED



"SALUTE"

WRITE US . .



FOR . . PRICES

"PENBERTHY" AUTOMATIC INJECTOR

MANUFACTURED BY

PENBERTHY INJECTOR CO., LIMITED, Windsor, Ont.



"SICO"

PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY PENBERTHY

Our New Assembled Order System

We've taken another step in the line of further simplifying and improving our Order System. We have it now at that ideal point where the minimum of labor and time is reached, and where the possibility of errors is indeed but a possibility.

The great benefit to be derived from the System is in the assembling of each customers orders. It will be admitted that in nearly every business frequent reference must be made to previous orders, and our arrangement in this new System gives a direct and ready reference, obviating any interference with ledger keepers, or the endless turning back to "folios."

The System is also elastic in its operation, permitting the filing of orders in many different ways and affording a continuous record for each customer.

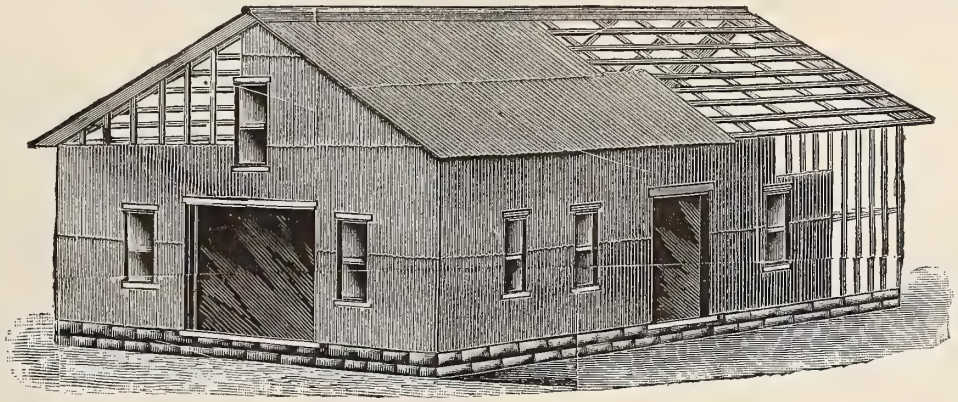
A good Order System will save money for you and expedite business. Ask the C.C. man to call—He'll give you a practical demonstration of how the System works.

THE COPELAND-CHATTERSON CO., LIMITED

GENERAL OFFICES : TORONTO - - WORKS : BRAMPTON

BRANCHES EVERYWHERE

Are You Cramped for Room?



Manufacturers should investigate our **"Acorn Quality" Corrugated Galvanized Sheets,** for roofing and siding storehouses, and other additions to their plant.

Such buildings can be put up **cheaply** and **quickly.** Only light framework is necessary, the Corrugated Sheets supplying great **rigidity.**

Why tie up Capital in expensive additions, when our Corrugated Galvanized Sheets, at small cost, give you a **warm** and **handsome** building which is good for **half a century**—one, too, which is **fireproof, lightningproof** and **waterproof.**

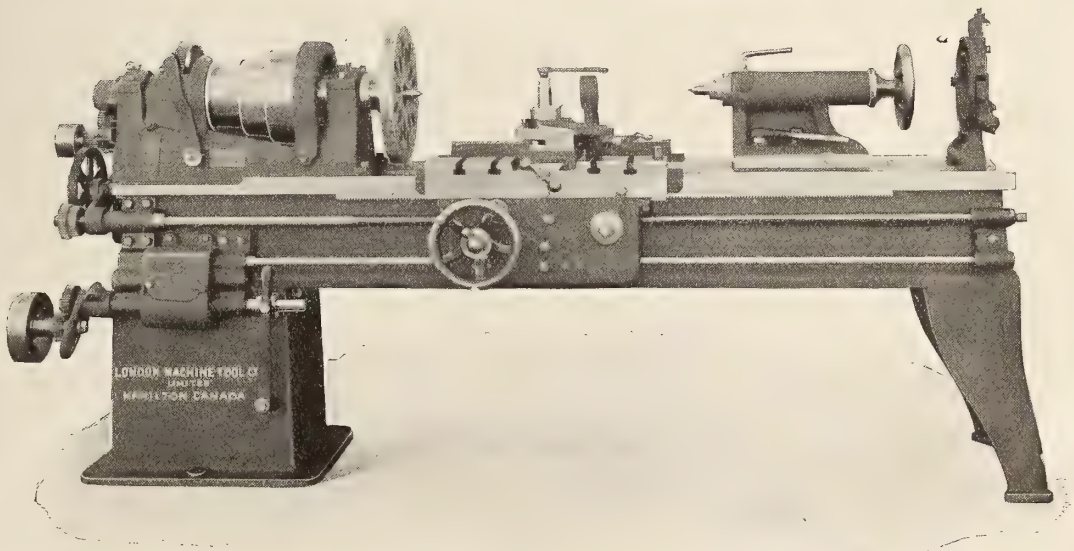
LET US TELL YOU MORE ABOUT THEM

The Metal Shingle & Siding Co., Ltd., Preston, Ont.

MONTREAL	ST. JOHN, N.B.	QUEBEC	WINNIPEG	CALGARY
Cor. St. Catharine and De Lorimer	Emerson & Fisher	J. A. Bernard	Clare & Brockest	Ellis & Grogan

LONDON MACHINE TOOL CO., Ltd.

HAMILTON - CANADA



This new type Lathe is designed to successfully withstand all strain through use of HIGH SPEED STEEL. Lathe has four changes of feed obtained instantly by simply throwing over lever in front of Machine. CARRIAGE is very powerful with long bearing on ways. CONE has three steps for 3 in. Belt.

WRITE FOR FURTHER PARTICULARS

EXPANDED METAL



No. 2 Colliery, Dominion Coal Co., Glace Bay.
Walls, Roofs and Floors by Expanded Metal System.

STANDARD FOR
FIREPROOF CONSTRUCTION
AND ENGINEERING
CONCRETE REINFORCEMENT.

ECONOMY - STRENGTH.

GET OUR QUOTATIONS
AND PRICES.

Catalogues on Application.

Floors Ceilings
Roofs Columns
Partitions Sidewalks
BRIDGES, Etc.

EXPANDED METAL AND FIREPROOFING CO., Limited
100 KING STREET WEST - TORONTO.

15 x 34 inch Wheelock Engine

SECOND-HAND—IN GOOD ORDER

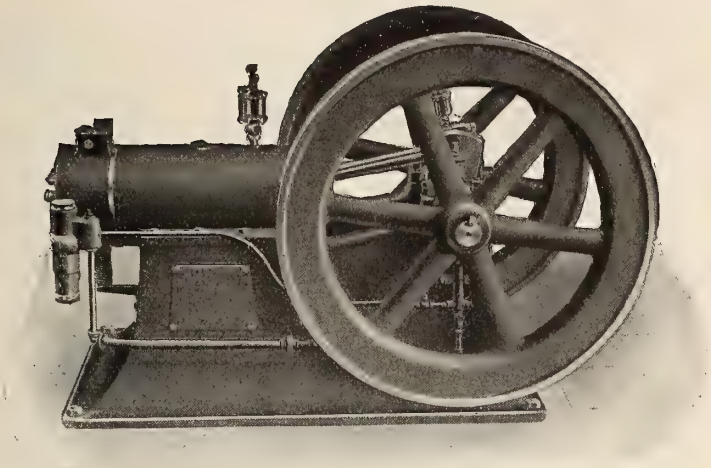
Complete with fly wheel 11 feet in diameter, steel crosshead, automatic lubricating pump, two extra pillow blocks and one wall box. Additional shaft 12 feet long, coupled to end of crank shaft, 4¾ inch diameter. Pulley 15 inch face, 5 feet in diameter.

Included with engine is exhaust steam head, oil separator and Webster's Patent Heater.

FOR FURTHER PARTICULARS AND PRICE WRITE

THE JOHN BERTRAM & SONS COMPANY, LIMITED
DUNDAS, ONTARIO, CANADA

THE FAMOUS McVICKER



One-third the number of parts, therefore one-third the trouble.

No Cams, Gears, Eccentrics, or trigger work of any kind.

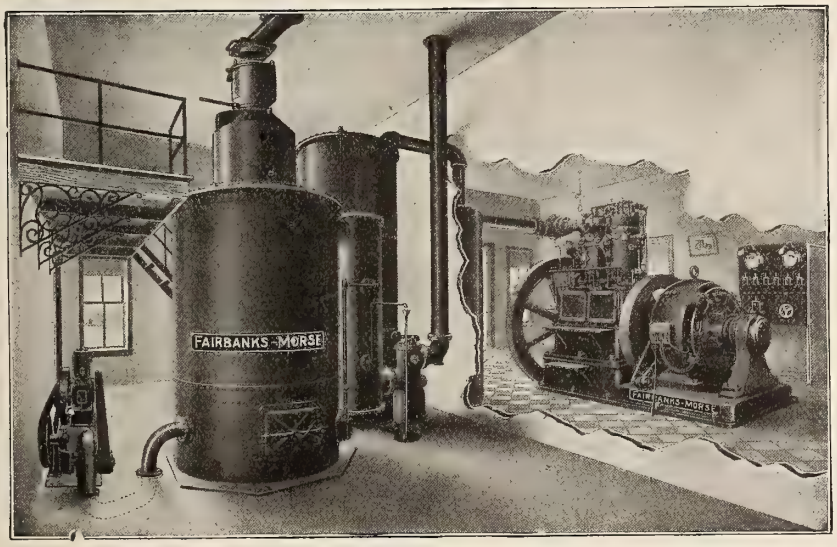
A Governor ten times as sensitive as any other.

The only Gas and Gasoline Engine that runs either way.

THE CANADIAN McVICKER ENGINE COMPANY, Limited

GALT — ONTARIO

Every Manufacturer and User of Power



Should write us for full information re

Fairbanks-Morse Gas, Gasoline and Suction Gas Plants

Our line is more complete than that of any other Engine Manufacturer.

Our Engine Design and Construction are so totally different and so far in advance of other manufacturers, that we are recognized as leaders, and our Engines as Standard, and are in a CLASS BY OURSELVES.

WRITE FOR PAMPHLETS AND FULL INFORMATION

THE CANADIAN FAIRBANKS COMPANY, LIMITED

MONTREAL - TORONTO - WINNIPEG - VANCOUVER

Costs More

TO ADVERTISE IN

The Globe

CANADA'S NATIONAL NEWSPAPER

But—

Returns warranted our patrons in using **242,925 lines** more display advertising during 1906 than in 1905.

THE

Standard Ideal Sanitary Co., Limited

Manufacturers of
Cast Iron, Porcelain Enamelled

Bath Tubs,
Lavatories,
Sinks, Urinals,
Etc., Etc.

Our NEW CATALOGUE is now ready and will be mailed on request.

Factories and Head Office
PORT HOPE, ONTARIO, CANADA

BANK AND OFFICE FITTINGS

INTERIOR FINISH FOR PUBLIC BUILDINGS & RESIDENCES

CHURCH, SCHOOL LODGE, AND OPERA HOUSE FURNITURE

THE
GLOBE FURNITURE CO.
LIMITED
MANUFACTURERS
WALKERVILLE, - - ONTARIO.

THE RIORDON PAPER MILLS
LIMITED,
MERRITTON - ONT.
Mills at Merritton, Ont., Hawkesbury, Ont.

Manufacturers of News Paper, Hanging Paper, Heavy Wrapping Papers and all lines of Building Paper. The largest manufacturers of Sulphite Fibre Wood Pulp in the British Dominions.

Industrial Canada.

ISSUED BY

The Canadian Manufacturers' Association,

Incorporated.

"There be three things which make a nation great and prosperous: A fertile soil, busy workshops, and easy conveyance for man and goods rom place to place."—Bacon.

Vol. VII. TORONTO, FEBRUARY, 1907. No. 7.

INDUSTRIAL CANADA

Issued monthly as the the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercia prosperity of Canada.

COMMITTEE.

GEO. BRIGDEN (Chairman).

S. R. HART. C. R. MCCULLOUGH. S. M. WICKETT

R. A. DONALD. J. M. SINCLAIR. J. J. MCGILL.

AND THE GENERAL OFFICERS OF THE ASSOCIATION (Ex-officio)

Subscription—One Dollar per Year. Single Copies, 10 cents
Advertising Rates made known on application.

OFFICES—TRADERS BANK BUILDING, TORONTO.

General Secretary: G. M. MURRAY.

Editor: F. P. MEGAN.

Advertising Manager: B. L. ANDERSON.

THE ASSOCIATION'S NEW OFFICES.

THE Canadian Manufacturer's Association has now its home on the fourteenth floor of the Traders Bank Building, Toronto. The new offices are worthy of the Association. The suite consists of an adequate committee room, the want of which has long been felt, a reception room for members, where the Association library will be kept, and writing desks, etc., will be provided, a President's office, and rooms for the various departments of the Association's work.

Members are especially urged to make use of the facilities supplied in the general offices. The Association is worth as much to the individual members as they wish to take out of it. It will be worth much more to them if they familiarize themselves with the various activities into which it enters. Particularly members from out of Toronto are invited to make the Association offices their headquarters while in the city. They will be convenient as a meeting place and for the transaction of business.

A COMPULSORY EIGHT-HOUR DAY.

MR. ALPHONSE VERVILLE, M.P., seems to have chosen a most inopportune time for the introduction of his Eight-hour Day Bill. Whatever arguments he may be able to put forward in support of a shorter working day, he is almost certain to be overwhelmed by the storm of opposition which such a measure will provoke at a time when the whole country is suffering from the shortage of labor.

The manufacturers are naturally up in arms. It is obviously impossible to operate one part of a factory nine or ten hours a day on general orders when the other part is only working eight hours on Government contracts. It is equally impossible for one manufacturer to keep his mill going ten hours when the workmen in another mill just across the street are only required to work eight. Such conditions would throw the labor market into a state of complete disorganization, from which it would emerge only when the hours of labor were equalized. In other words, an eight-hour day on Government contracts would simply be the thin edge of the wedge that would ultimately bring about an eight-hour day everywhere.

If the hours of labor were reduced without a corresponding reduction in the daily wage, the cost of production to the manufacturer would be increased. The immediate result of an increased cost of production would be an advance in the price charged the consumer. Another result would be that the manufacturer would find himself at a decided disadvantage in meeting foreign competition in his own market. It is questionable if some industries would be able to survive the competition of the foreign producer, who pays his men less and works them longer, particularly when the protection these industries enjoy is so meagre. Export trade under such conditions would be almost an impossibility.

But it is from the farmer that the most determined opposition may be expected. If the manufacturer finds himself handicapped by the scarcity of labor, skilled and unskilled, the position of the farmer is immeasurably worse. He is more than handicapped; he is actually suffering. For years there has been a steady migration from the farm to the city, and the farmer's cry for help has been loud and insistent. Government immigration agents have bestirred themselves to supply the places of the deserters, only to find that the new arrivals in time forsake the farm for the city workshop. After ten years of such immigration the acreage under cultivation in Ontario is less than before. Many a

splendid farm has of late years been given over to pasture, simply because the owner cannot obtain help to work it. And why? The attractions of city life offer a partial explanation, but the great drawing power has been the shorter hours of labor and the less arduous occupations of city factories. If conditions for the city worker are now to be made still more attractive by a reduction in the hours of labor from nine or ten per day to eight, the farmer's hired man bids fair to become a tradition of the past.

In the face of such opposition it is unlikely that the demands of organized labor, which represents little more than 8 per cent. of the labor vote, will receive much consideration from the Parliament at Ottawa.

TRADE REPRESENTATIVES IN CANADA.

MR. RICHARD GRIGG and Mr. Graham Gow are at present in Canada representing the Board of Trade of Great Britain and the Government of New Zealand respectively. Mr. Grigg, who has been here now for several months, represents a movement which will be cordially welcomed by all Canadians. Appreciation of the efforts made by Canada to increase trade within the Empire is shown by a growing desire upon the part of Great Britain to take advantage of the favors offered. Mr. Grigg is here to get a thorough grasp of the needs of this country and its resources as a source of supply for Great Britain's wants. He has already travelled from coast to coast, stopping at important points, meeting business men and absorbing some of the spirit of the country. He will appoint permanent representatives in the bigger cities, and will thus establish a regular channel of information for the benefit of his Government and the people of the Motherland.

Mr. Graham Gow is an energetic trade representative, with a healthy enthusiasm for his own country, and with high hopes for an increased Imperial trade. He is doing a good work in getting into direct contact with those who need New Zealand's products, or who can give New Zealand what she wants. Hitherto most of our trade has been indirect. We import our wool and rope fibres from England, although there would be a great economy of time in bringing them direct from New Zealand or Australia. These are just examples of the points which Mr. Gow is bringing forcibly to our attention.

The presence of trade consuls is always productive of good. They disseminate valuable information regarding the countries they represent, open up new markets, and stimulate home manufacturers to redoubled efforts. The representatives of Great Britain and New Zealand are doubly welcome in that they represent a growing tendency towards the ideal of the maximum of trade within the Empire. If every unit would adopt the policy of buying everything possible at home, and after that buying within the Empire, the Empire as a whole would flourish with increased strength and vitality.

FIRE INSURANCE COMPANIES' DEPOSITS.

AN important opinion has been recently rendered by the Attorney-General of New York State that the funds held by fire insurance companies for unearned premiums are trust funds for the benefit of the policyholders to secure the repayment to them of the premium due for the unexpired term of the policy or for the purpose of protecting the policyholder by reinsurance in other companies.

The general impression in this country is that the deposits held by the Government are equally for the purpose of securing the payment of losses due by the insurance companies, but if the doctrine propounded by the Attorney-General of New York State is correct it is just as well that it should be fully realized.

The opinion of the Attorney-General, Julius M. Mayer, is quite firm, and is expressed in the following language:—

"It must be clear that the fund out of which must be "paid fire losses and expenses of the company consists of "the capital paid in and the amount already earned upon "the several policies issued by the company. The policy-"holder, for the purpose of illustration, pays to the com-"pany $30 in advance, and the company agrees for the "period of three years to indemnify him against loss by "fire in a sum not to exceed $1,000. At the time of the "delivery of the policy the company has $30 of the policy-"holder's money, and the policyholder has simply the "policy. When one year has elapsed the company has "actually earned $10 of this $30, provided, of course, no fire "loss has occurred in the meantime; and that $10 is part "of the assets of the company, applicable to pay fire losses "and other expenses. At the end of two years the company "has actually earned $20; and I am of the opinion that the "unearned premiums in the hands of the company thus paid "in advance by the policyholder become in the hands of the "company a trust fund, so far as the unearned portion is "concerned, for the purpose of protecting the policyholder, "either by reason of reinsurance or returning to him the "unearned premium. The company would have no right to "use this unearned premium in the discharge of its other "obligations to the detriment of the policyholder, who has "thus deposited it with the company."

The Canadian law **for other than domestic companies** is similar to the New York State law in respect of deposits with the Government for the security of the policyholders, and the duty of the Government is expressed in Section 9 as follows:—

"If it appears from the annual statements, or from an "examination of the affairs and condition of any company "carrying on the business of fire or inland marine insur-"ance, that the reinsurance value of all its risks outstanding "in Canada, together with other liabilities in Canada, "exceeds its assets in Canada, including the deposit in the "hands of the Minister, the company shall be notified by "the Minister to make good the deficiency; and on its "failure so to do, within sixty days after being so notified, "he shall withdraw its license."

To make this subject clear to the average insured, let us take two concrete illustrations, but for obvious reasons we refrain from the mention of names. Company X. Y. Z. is a domestic company, and is possessed of total assets of $291,000. It has a liability for reserve of unearned premiums for outstanding risks in Canada of $200,000; it has a deposit with the Government of $51,000 ($50,000 being the requirement before a charter can be obtained).

Company A. B. C. is a foreign corporation, and operates under a law similar to that which governs all classes of companies in New York State. It has total assets in Canada of $530,000; it has a liability for reserve of unearned premiums for outstanding risks in Canada of $400,000; it has a deposit with the Government of $444,000.

It is generally believed that in the particular cases cited the Government deposits would be available for the payment of fire losses, and the measure of responsibility to be attached to each is calculated accordingly. If Attorney-General Mayer's opinion is sound the whole of the deposit

of the domestic company must be held for the purpose of protecting the policyholder for the unearned premium; and in the case of the foreign company all but $44,000 of the deposit would be applied for a similar purpose. What, then, becomes of the security to the people for fire claims?

Conflagrations in this country so far have not entailed responsibilities upon the companies that their assets were not adequate to cover, but it is well known that the margin between safety and disaster is exceedingly narrow in a number of the companies now transacting Canadian business.

It is as important that the companies should be sound as that the policies should be properly written, and both should engage the careful attention of the insured.

MR. KING'S MISSION TO ENGLAND.

As a result of the trip of Mr. W. L. M. King, Deputy Minister of Labor, to England, an amendment has been made to the Merchants Shipping Act of Great Britain, making it an offence to induce emigration by false representation. It had been urged by representatives of organized labor that workmen in Great Britain were induced to come to Canada under a false impression of the labor conditions existing here. On the other hand, employers showed that union agents were misrepresenting conditions in an effort to deter mechanics from coming to this country. The emigration agencies may have been over-zealous in securing laborers. But it may at least be said that there has been work in Canada for every able-bodied man who wanted it. On the other hand, the misrepresenting of conditions in order to deter emigrants from coming out could not but be detrimental to Canada in every way.

To overcome these conditions, such as they were, the Government of Canada sent Mr. King to England to ask for legislation, making it an offence to induce or deter emigration by false representation. He was unable to secure the British Government's consent to this. The Government, however, agreed to bring in an amendment making the first half of the measure an offence. In accepting this without consulting his Minister at Ottawa Mr. King certainly exceeded his authority. He was not sent to England with power to negotiate. When he found it impossible to secure the legislation which was demanded, there was no course open to him but to refuse a compromise. The Government at Ottawa was alone competent to decide on the desirability of such.

The amendment to the Merchants Shipping Act is manifestly unfair. It singles out one phase of the question and brands it as an offence, whereas if misrepresentation in the one case is wrong, it is certainly wrong in the other. For years it has been known that agents of Canadian organized labor have gone about England discouraging workmen from coming to this country, and circulating false stories about the labor conditions here. The Canadian Government have taken no steps to correct these mis-statements. They have been most careful that no official encouragement should be given to a skilled artisan to come to Canada.

In agreeing to the legislation as it was passed, the Deputy Minister has merely carried into the Department of Labor the policy which has characterized all our immigration work. The labor unions appear to be alone considered. The need for workmen in Canada to-day is so urgent that there should be no petty obstacles or discouragements put in the way of immigrants who desire to come to Canada.

DISCRIMINATION AGAINST SKILLED WORKMEN

As the season approaches for the resumption of general outdoor work the question of a supply of workmen again becomes pressing. Even during the winter there has been a shortage of skilled help in many lines of industry. The cry for labor has not let up. If this is so now, when the factories have the advantage of all the men who during the open season worked on railroad construction, outdoor building operations and farming, how much more will it be felt when these various activities are resumed in the spring? It is foolish for us to blind our eyes to what must occur in a very short time.

Canada is now undergoing a period of internal development. Vast areas are being opened up for colonization. Our agricultural population is increasing by tens of thousands per year. What effort is being made to provide this population with their necessary equipment of clothing, furniture and implements? This class of population is increasing at much more than the natural rate of increase. To provide for them, the workmen in factories must increase in numbers at more than the natural rate. In other words, we must have factory workmen immigrate to this country.

The Government of Canada grants a bonus to agencies sending out farmers. When the farmer gets here he is granted one hundred and sixty acres of good farming land. Why should such discouragement be offered to those workmen who would take their place in the country as skilled mechanics, developing in their own way the natural resources of the country just as much as the agriculturist does? The machinist, the carpenter, the ship-wright, all assist in the development of the forest and mine. Indirectly, too, they assist materially in the development of the soil.

Yet we find in the Government circular to booking agents such instructions as these: "The agents are particularly requested to refrain from sending any claims on persons not fully coming within the requirements as to occupation, etc." Again we find in the printed instructions from Ottawa: "To go beyond the attempt to meet these requirements would be to use the money of certain classes of Canadian taxpayers for the purpose of securing competitors against them in their several callings, for which they would naturally hold the Government to account." The requirements refers to farmers. We may fairly ask why the general funds should be used to help one class of immigration any more than another when there is as urgent a need for one as the other. Moreover, competition is an unfair term where there is ample work for all.

ASK A BOUNTY FOR SHIPBUILDING.

THE shipbuilding industry of Canada has not flourished as it gave promise of doing thirty years ago, when every river in the Maritime Provinces served as a shipyard. Aided by our unexcelled timber supplies, by our coasts specially suited for shipping, by a population along the coast which took naturally to the sea, our vessels gradually became a considerable force in the world's fleets, until finally we rose to fourth place among the ship-owning nations of the world. This was in the time of wooden vessels.

The introduction of steel vessels wrought a change. Previously Canada could compare with any other nation in the cheapness of its raw material, while its quality and quantity were unquestioned. But Canada's iron deposits had not then been developed. Our steel industry was in its

infancy, if not altogether unknown. We had neither the raw material nor the skilled workmen to take up the new line of work. The building of wooden vessels was passed. The country was not in a position to take up the building of steel ones. The old artizans, their work having disappeared, drifted off, many to the United States, and the old lives of industry languished and decayed.

But the wheel is nearing the circle again. The coast which was formerly known to send out its regular quota of vessels is just as suitable to-day. In fact, only now is it becoming fully appreciated. Its comparative nearness to Great Britain and the greatness of the foreign trade of the country are annually making the seaports of greater account. To replace the old raw material, timber, has grown up a steel industry which is already adding greatly to the wealth and prosperity of the Maritime Provinces. Skilled workmen and a proper raw material are again available. Are we going to revive the old industry?

On another page of INDUSTRIAL CANADA will be found a statement which has been presented to the Government, setting forth the conditions at present obtaining. The document is clear and explicit in its presentation of the facts, and is moderate in its requests. No one doubts the great benefit which a national shipping confers on a nation doing a foreign trade. In Great Britain are assembled steamship lines which make her the distributing centre of the world. She gets the benefit of the cheapest raw materials, and she lays her manufactured products down in other countries at the least expense. In a speech recently delivered by Secretary of State Root the absolute necessity of a national shipping, if the United States was to expand as an export country, was the all-important point raised.

The time is ripe for an energetic effort to advance the industry in Canada. Our trade is sufficient to provide business for many fleets. The people of the Maritime Provinces are enthusiastically desirous of reviving a former prosperity. Capital will readily be provided for the establishment and extension of shipbuilding yards. The bounty asked, in order that the industry may be given a chance to live, is small. It does not commence to offset the duty on the materials to be imported. Yet on finished ships there is no duty. Prompt governmental action will provide a stimulus which will be felt throughout the country.

EDITORIAL NOTES.

Interprovincial trade is to be encouraged by the provision of cold-storage facilities whereby the fish of the Maritime Provinces can be transported in good condition to Quebec and Ontario. The fish of the Atlantic Provinces are justly famed. If they can be delivered in the towns of central Canada fresh, they will find a ready market. The Dominion Government will contribute $25,000 to encourage the railways to supply a cold storage service.

Once again the subject of transportation has been discussed in the Federal House. The report of the Royal Commission, which was brought in on December 11, 1905, outlines a very complete scheme for the improvement of railroad routes and waterway courses. Methods for increasing the facilities at harbors for the quick handling of freight are described, and a broad plan is laid out for systematic work. It will be well to keep the subject right to the front. Considerable work has already been undertaken, but much remains to be done. The subject is of vital importance to Canada.

For the five months of the fiscal year ending November 30th the imports of merchandise into Canada amounted to $148,592,127, and the exports of domestic produce were $115,212,079. The increase in imports, compared with the same period last year, is about thirty millions; the increase in exports about four millions.

A pleasant aftermath of the Association's excursion to England in 1905 is a series of letters which Mr. W. K. George has just received in acknowledgment of the mementoes recently sent to the London Chamber of Commerce and some of its individual members. The members of the excursion party are indebted to Lord Strathcona for his willing work in making all arrangements for the presentations. These took place at a dinner given by Lord Strathcona at the Athenæum Club. The Earl of Elgin, Secretary of State for the Colonies, presented the gifts, and, alike by his official position and distinguished personality, emphasized the fraternal spirit of the occasion.

Appreciation of the loving cup is expressed in the following letter from the Chamber of Commerce:—

London, E.C., 21st Dec., 1906.

The President, Canadian Manufacturers' Association,
Toronto, Canada.

Sir,—We were desired by the Council of the London Chamber of Commerce at its last meeting to convey to yourself and the members of your Association their most hearty thanks for the handsome silver vase which has been presented to the Chamber in commemoration of your visit to London in the summer of 1905.

The fact that this gift has been conveyed to the Chamber on your behalf through Lord Strathcona, the High Commissioner for the Dominion of Canada, and the Earl of Elgin, Secretary of State for the Colonies, has been an additional source of gratification to this Chamber, and renders the presentation, by reason of the fraternal and Imperial considerations associated with it, an event in the Chamber's history which will ever be remembered, while the gift itself is a valued addition to the Chamber's possessions. Its intrinsic merits as a specimen of Canadian workmanship have commanded the admiration of all who have seen it.

We beg to assure you that the good feeling existing between our respective bodies has been, and will remain, a matter of great satisfaction to ourselves and to the members of the Chamber.

We are, Sir,
Yours faithfully,
(Signed), THOS. F. BLACKWELL,
President.

CHARLES CHARLETON,
Chairman of the Council.
KENRIC B. MURRAY,
Secretary.

Letters were also received from Mr. K. B. Murray and Mr. R. S. Fraser, acknowledging the gifts which were presented to them. They unite in expressing the most kindly remembrances of the visit of the Canadian manufacturers, and in hoping for a renewal of the friendships resulting from that trip. Members of the party will be glad to know that the kindnesses which they received in England have been thus pleasantly acknowledged, and that the friendly relations which were then established have not been suffered to lapse.

FIRE INSURANCE POLICIES.

The Average Insured Too Confiding in Accepting Fire Polices Without Examination or Competent Supervision.

THE last report of the Insurance Committee to the Executive Council, which appears in full in the minutes of the meeting in another part of this issue, contains the following paragraph:—

"Even in the city of Montreal, where it might be rea-"sonably presumed the insurance agents would give to the "insured the benefit of intelligently drawn policies, free "from ambiguity or imperfectly understood conditions, it is "manifest, from the policies that have been the subject of "recent claims in this city, that little regard is paid by the "average agent to the insured's best interest, and equally "that the insured is much too confiding in the acceptance "of such contracts without examination or check of any "kind."

Same Conditions Elsewhere.

During the past two years the Insurance Department has been called upon, in a number of cases, to represent the members of the Association in the adjustment of fire losses sustained by them, and the fact that, since the early part of December, Montreal has witnessed a number of fires in which our members were interested has naturally caused the Department, in the paragraph above quoted, to specifically refer to conditions in that city. But the remarks made do not apply alone to Montreal; they are, by experience, found applicable to the Provinces of Ontario and Quebec generally, and it is not unfair to assume that they may, therefore, be applied to the other Provinces of the Dominion.



Views of the ruins of the "Stephens Building," Montreal, by the fire of January 3rd, 1907, in which some of the members of the Canadian Manufacturers' Association were temporarily put out of business.

These pictures do not show the full extent of the loss, as the fire crossed the lane or court, and went through to St. James Street on the south. The exterior view is of the St. Antoine Street frontage.

There is apparently no reason why this fire should not have been stopped at the front or St. Antoine Street buildings if the exposing openings had been protected, as they should have been, by wired glass windows in metal frames and by standard fire doors.

The article on "Fire Insurance Policies" may possess added interest in the light of these photographic views.

Loop-holes in Policies.

The chief difficulties that have been encountered during the past two years may be thus summarized:—

1. Imperfectly drawn wordings, as a result of which items which should have been insured were excluded from the benefits of the policy.
2. The subdividing of the policy into different items, all of which should have been included in one sum, the result being a loss to the insured which need not, and should not, have occurred.
3. The imposition of conditions which the insured imperfectly understood, and which were not observed.
4. Incorrect descriptions of the occupancy of a risk which enabled the insurance company to repudiate liability had it been disposed to do so.

It is to be noted that each of the points thus indicated has been met in practical experience as a result of a fire, and that a number of our members have sustained loss, over and above that paid by the insurance companies, which would have been avoided if ordinary intelligence had been displayed in the first instance.

The question of the adequacy of the fire insurance policy at the time a fire occurs is of sufficient importance to warrant the citing of specific cases to illustrate the points above referred to, and, if experience is worth anything at all, the lesson should be well learnt, and should lead each to enquire for himself if his own circumstances are such as to expose him to like difficulties when the necessity arises for him, if it ever does, to realize on his policies.

Imperfectly Drawn Wordings.

Two cases may be appropriately cited under this head. In the first case the insured was a piano and organ manufacturer. The policies read, "On stock of pianos," with the exception of one for $500, which included "other musical instruments." Value of stock of all kinds was $41,346.58; the actual loss was $25,144.15; the actual insurance was $42,550. In ordinary circumstances, therefore, the insured would have been entitled to the entire loss sustained, but, owing to the imperfectly drawn policies, the actual loss paid by the insurance companies was $21,851.20, or a net loss to the insured of $3,292.95, this being the value of organs and other musical instruments not mentioned, directly or indirectly, and consequently not insured.

In the second case the insured was a manufacturing jeweler, whose policy covered $3,000 on certain specified stock **in the vault.** At the time of the fire there was $3,750 worth of stock and supplies in the vault, of which, however, only $2,400 applied to the class of goods covered in the policy. There was no insurance on stock in process of manufacture, although the intention of the insured was that the policy of $3,000 should apply over all. In this instance the loss to the insured by the imperfectly drawn wording was about $1,500.

Sub-dividing Policies Into Items.

In the preparation of a policy wording it is usual to have three items, viz.: Building, which should cover all fixtures and fittings of every kind; machinery, which should cover plant of every kind; stock, which should cover stock and materials of every kind. This is the general rule followed. The case we cite under this heading is the same as number two of the preceding paragraph. The insured were tenants, and, therefore, required insurance only on plant and stock, and the stock has been already dealt with. The insurance was arranged thus:—

Item 1. On Machinery only.
2. " Factory furnishings, fittings and supplies.
3. " Factory equipment for machinery only.
4. " Office furniture.

And it is not difficult to see where, apart from all other considerations, there was plenty of scope for dispute in endeavoring to determine what each item really covered.



After the recent Montreal Fire.

The insurance value and loss paid was as follows:—

	Insurance.	Value.	Loss Paid.
Machinery	$13,800 00	$13,606 00	$12,245 40
Factory furnishings..	500 00	3,800 00	500 00
Factory equipment...	1,100 00	1,100 00	1,100 00
Office furniture	100 00	486 00	100 00
	$15,500 00	$18,992 00	$13,945 40

It will be apparent that if the policies had not been stupidly sub-divided the loss paid by the companies would have been $15,500, instead of $13,945.40 as shown above; and the insured, therefore, sustained a loss over and above that paid by the companies of $1,554.60 because of the inexcusable blunder of the agent.

Imperfectly Understood Conditions.

It is difficult to pick out the most interesting case under this heading, but nearly all centre around the famous co-insurance clause, which an ordinary insured may be pardoned for not properly understanding. In six out of ten cases the insured have suffered because this clause, just and reasonable as it is, has been accepted by them. It is not our purpose to discuss the working of the clause, but the result of its operations should be noted, and if in anything like 60 per cent. of the cases where loss happens the insured suffer because of its application, it surely is worth considering in its relation to the risk before a loss happens By way of illustration we cite this case:—

Actual value	$8,400 00
Actual insurance	2,000 00
Actual loss	1,000 00
Actual loss paid by the insurance companies	297 62

Incorrect Descriptions of Occupancy.

In the wording of a policy a full and accurate description of the occupants of the building should be recited, and, moreover, changes, where the hazard is not increased, should be provided for. We cite this case. The risk was described in the policy as a bookstore (no printing or bookbinding done) and dwelling. A change took place, and the dwelling portion became tenanted by a manufacturer of a dangerous and inflammable compound. A fire occurred in the store part, neither directly nor remotely due to the manufacturer, and the policy of insurance was vitiated by the change of occupancy; the result was a compromise by which the insured accepted 70 cents on the dollar of his claim. This meant a pecuniary loss to him of $7,200.

What is the lesson to be learned from the recital of these cases? Nothing but this: see that your policies are all right **before** rather than **after** a fire.

From the report already referred to we also quote the following:—

"No word of complaint can be uttered against the insur-"ance companies, or the adjusters representing them, who "have in every case shown a commendable desire to be "prompt in their settlements and liberal in the interpre-"tation of their obligations, but they cannot exceed the "scope of the contract nor waive the conditions that have "been accepted by the insured."

This is but doing justice to the insurance companies, and we believe we are well within the mark when we say that the companies welcome all means by which disputes will be obviated and friction avoided.

Motor Cars for I. C. R.

The Intercolonial Railway will build three motor cars in their Moncton shops for use in the proposed motor service on the I. C. R. next summer. The cars will be modelled after those used on the Great Western Railway in England. They will be 65 feet long, divided into three sections, the first section for the motor, the second for the baggage and the third for the passengers. The motor will be about 200 horse power.

A New Carving Machine.

An inventor of a new wood-carving machine wishes to dispose of the Canadian rights. The number of the Canadian patent is 97,509, issued February 13, 1906. The inventor has already constructed and used one of the machines and has found that it works in every way satisfactorily. Drawings may be seen at this office. Full particulars may be had from Henry Newhouse, 322 East Bridge St., Grand Rapids, Mich.

SAINT JOHN, NEW BRUNSWICK.

A Canadian Sea Port with Great Possibilities as a Manufacturing Centre.

OLIVER WENDALL HOLMES in the "Autocrat of the Breakfast-table" has stated, "The axis of the earth sticks out visibly through the centre of each and every town or city." This idea was so impregnated into the inhabitants of Saint John in the early days of Confederation and fanned into flame at various times since, that development of the advantages as a manufacturing centre has not been as rapid as in other towns and cities in Canada with fewer natural resources.

The doctrine, rather disastrous to individual enterprise, has been preached that unquestionably this city was to become one of the greatest maritime cities in North America. Consequently, large ideas and short cuts to wealth got possession of many, who, under different tutelage, might have been the industrious founders of manufacturing establishments that would be reaping the fruits of the unparalleled prosperity in the Dominion of Canada to-day. Too much blame should not be attached to the people, because Saint John, some forty years ago and later, occupied the position of the fourth largest port in the British Empire for registered shipping. Not of Canada, not of America, not of Great Britain, but of the whole British Empire. The list was London, Liverpool, Glasgow, Saint John, New Brunswick.



View of St. John's Harbour, showing warehouses, river boats, and Atlantic liners

Evolution in Shipbuilding.

When the building of wooden vessels was a manufacturing interest of great importance the city of Saint John and its enterprising people were well known, in maritime circles, throughout the world. The change in shipping, from wood to iron and steel and from sail to steam, was most rapid, and almost in a day the building of wooden vessels became a thing of the past. It was hard to believe; it was a complete upset to the workers of this city. Among the working population were skilled mechanics suddenly brought face to face with the fact that the occupation at which they excelled, and at which excellent wages had been earned, was gone forever. The business had been generally a lucrative one for the capitalist and for the workingman. They did not turn to manufacturing the articles that could have been successfully and profitably manufactured in this city. The capitalist, if he remained here, sent his money abroad, investing in iron or steel vessels, or made his investments outside of active business enterprise in the city. The workers took up the casual work that followed for years in the line they had been accustomed to. Many changed their homes to the United States, where the business of building wooden vessels continued later than in Saint John.

In 1877 the city was visited by a most disastrous fire that materially retarded progress, and later, when the city was rebuilt, owing to a general depression prevailing in this country not at that time felt in the United States, many of the younger citizens moved away.

All this is to show why a city so splendidly situated and adapted as a manufacturing centre has not developed manufacturing establishments as rapidly as other places with far fewer advantages.

An Excess of Advantages.

It seems in the history of places, like individuals, that sometimes "their graces serve them but as enemies." Had Saint John not been so splendidly situated as an open port all the year round, with the comparatively short Atlantic voyage to Liverpool; had the people not had their attention constantly directed to the splendid future that awaited this city in this direction; had leading Canadians not emphasized the idea that Canada must have her own ports for summer and winter; had Saint John occupied a less prominent place in this respect, it might have become before this, as no doubt it is destined to be in the near future, a large manu-

facturing community. The people, instead of turning to the slow but sure methods of development, and taking advantage of opportunities to build up manufacturing establishments, have been for years in a constant state of unrest and ferment in expectation that development of the harbor of Saint John and facilities for handling the import and export trade of Canada would not only bring results beneficial to the city, but would divert Canadian trade through Canadian ports, and that ultimately the magnificent harbors on the Atlantic seaboard in the Maritime Provinces, practically idle in the winter, would be brought into active service. It was expected that this idea would prevail throughout Canada, but years passed and nothing was done. It is principally owing to the fact that the people of Saint John expended $1,000,000 of civic money in providing public works, which produced results unparalleled in the rapid growth of trade in any port in Canada that the long-looked-for development in this direction is now assured.



Seven Atlantic liners in the St. John Harbour.

An Unexcelled Harbor.

The harbor of Saint John, around which the city is built, is one of the finest in the world, and is open the year round. It has become the "Winter Port of Canada," and the magnificent C.P.R. steamer, "Empress of Britain," sailed a few days ago for Liverpool with the largest passenger list ever leaving a Canadian port. The mails from London to China and Japan have been despatched by the C.P.R. via Saint John in record time.

Saint John presents a most attractive field as a manufacturing city. It is situated at the mouth of the River Saint John, one of the most beautiful rivers in America, navigable for large steamers for eighty-four miles, to Fredericton, the capital of New Brunswick, and by small steamers to Woodstock, and during high water to Grand Falls, nearly two hundred and twenty-five miles from the sea—a river down which annually is floated some two hundred million feet of spruce, cedar, pine and hardwood logs, the manufacture of which by the large sawmills at Saint John and other points constitutes a splendid business, and gives occupation to a large number of people.

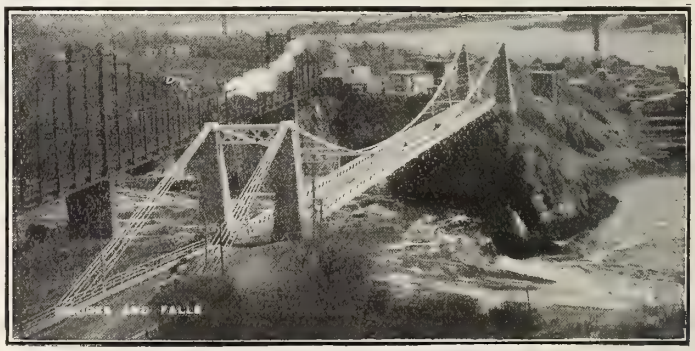
Big Transportation Facilities.

There is constant communication with all parts of the world. Steamship lines to Great Britain and Ireland, United States, Europe, South Africa, West Indies, etc., and before long steamers will leave Saint John direct for Fort William, Ont. There is rail communication all over Canada and the United States. The Eastern terminus of the C.P.R. is here, with connection at Vanceboro, Me., for Boston, New York, etc. There is also an important branch of the Intercolonial Railway, having close connection with the Grand Trunk Railway at Montreal. The New Brunswick Southern Railway runs to border towns, and it is expected the line will be extended via Eastport to Boston and all United States points. When the Grand Trunk Pacific is completed this is to be one of the termini. Raw material can be brought here at the lowest cost of ocean carrying.

Development of Natural Resources.

Proximity to the coal fields of New Brunswick and Nova Scotia (development in the former is rapidly going on), assures cheap fuel.

American capitalists are developing the immense water-power of Grand Falls, and in two years expect to transmit power electrically to Saint John at low cost.



Bridge and Falls at St. John.

Special Advantage for Manufacturing.

The climate is most suitable for manufacturing purposes—never too hot in summer nor too cold in winter. A large number of manufacturing establishments do good business. The public mind at present is awakened to further advancement in this direction, and considerable capital awaits investment in local industries, properly established.

It would appear to be an ideal place for the establishment of car works. All the requirements can be laid down at as low a cost, at least, as any point in Canada, and no place is better suited, geographically, for a large business of this kind than this city. Many former workers in Saint John are to be found occupying prominent positions in the industrial centres of Canada and the United States. Employment at their old home would bring large numbers of them back. The great flood of immigration to Western Canada must necessarily make demands for the additional establishment of manufacturing plants of various kinds in this great and growing Dominion. It has been an axiom away back from the time of the Phœnicians that "Cities by great waterways become great cities." It can unhesitatingly be said that to-day there is no city in Canada that presents any better prospect for a safe manufacturing centre than the city of Saint John.

The People Are Prosperous.

In a short sketch of this kind justice cannot be done to its many qualifications, and no attempt has been made to go into figures that could be garnered to show what has been accomplished from time to time. Enough to say that all through the vicissitudes of its career, with the few ups and the many downs that have come to it during the past forty years, it is unique in this respect: it will be found to be a city in which, while there may not be any vast amount of wealth to the individual, the people generally are prosperous in all walks of life. It now only requires its merits as a manufacturing city to be investigated by those interested, when the same development is bound to follow as its merits as a shipping port, so tardily recognized by the Canadian people, once investigated, by those interested, made it so quickly and so surely, the "Winter Port of Canada."

INTERNAL STRAINS IN IRON AND STEEL.

By Henry D. Hibbard.

Internal strains in iron and steel may be divided into two classes, according to the causes which produce them: 1. Those caused by an irregular rate of change in temperature, i.e., of heating or cooling. 2. Those caused by cold working or permanent change of shape of the piece under consideration by mechanical means at atmospheric temperatures, or at least at temperatures below that at which the metal is softened.

Internal strains due to irregular heating or cooling are by far the more important of the two classes. Because iron expands when heated and contracts when cooled, and indirectly for other reasons, internal strains, varying in all degrees from harmless to fatal, exist in all pieces of iron and steel. This arises from the fact that all commercial iron and steel is the product of processes involving heat, the strains in most cases being those set up by the more or less irregular rate of cooling. The amount of change in temperature does not affect the strains produced. The rate determines all.

The strains due to irregular cooling, unless chemical changes are involved, are apparently between part and part. Those due to cold working may be considered as between molecule and molecule because of the disarrangement of the molecular formation. The latter results usually in strains between the parts as well. Strains which come under this division of the subject should be considered under two aspects: 1. Those which arise during the continuance of the causes which produce them—that is, temporary strains. 2. Those which remain after their causes have ceased to act—that is, permanent strains. Temporary strains in many cases become permanent, especially when set up during cooling at an irregular rate. The phenomena of permanent strains are, during their formation, the same as of temporary strains.

The following cases will illustrate the two ways in which each kind of strain may result in rupture of the piece. When an ingot of hard steel is placed in a red hot furnace, and is so ruptured internally by the faster expansion of the interior, due to the rapid heating it undergoes, that it separates into pieces when forged or rolled, its ruin was caused by strains occurring while the cause, namely, the quick heating, was in operation. This is a typical example of temporary strains in steel. When a boiler plate of soft steel, lying cold on the floor of the shop, cracks suddenly it is because of strains existing after their cause had ceased its action. This is the usual kind of internal strains occurring in iron and steel, and is the kind chiefly meant in what follows in this part; it is an example of permanent strain. These two instances cited are, it will be understood, extreme cases, in which the piece is ruptured by the intensity of the strains. Strictly speaking, permanent strains are but relatively permanent, since they decrease when the piece is again heated, or through the seasoning or annealing action of time. When strains result in rupture of the piece of metal they are thereby much reduced in amount and otherwise modified.

THE ERA OF FIREPROOFING.

Those who prophesied a few years ago that the day of concrete was near at hand, find in the building permits of Canadian towns and cities ample justification of their prediction. Insurance rates and the high price of other building materials have both been important factors in determining our manufacturers when they build to build fireproof. To-day concrete floors and roofs are put up at practically the cost of wood. The new office of the Canada Foundry Co. and the fine structure for heavy loads recently erected for Messrs. Stauntons, Limited, wall paper manufacturers, both in Toronto, are splendid examples of fireproof expanded metal construction. The columns, beams, floors and roofs are all of concrete, moulded with temporary wooden forms, the slab work throughout each being reinforced by 3 inch mesh 10 gauge expanded metal, placed near the under side of same in its right position to take up the tensile strains. In this way a very thin floor plate is all that is required. The dead load which the footings have to carry, a very important factor, is reduced. Reinforced concrete stairs are also a feature of this type of construction, being a combination of the methods employed in panel and beam work. The stair and elevator openings are preferably cut off by fireproof walls built like the partitions. They are very light but of great rigidity. Steel studs of small section are secured to the concrete at floor and ceiling, being spaced one foot apart, and to these is wired expanded metal lath; mortar gauged with Portland ement is then plastered on both sides, the entire framework of metal being embedded. The completed partition is only two inches thick, but being virtually, when set, a stone of that thickness with a backbone of steel, it is exceedingly strong, and absolutely fireproof.

This same expedient is resorted to in old buildings of a non-fireproof nature, the wood ceilings being furred down with steel strips. Metal laths and plaster form a ceiling that effectually protects the inflammable wood work. In boiler rooms and other places where the fire hazard is extreme, a great reduction in insurance rates is now made for this improvement.

SHIPBUILDING IN CANADA.

Since the Advent of Steel Ships the Industry has Steadily Declined In This Country—The Remedy.

EASTERN Canada was formerly one of the great shipbuilding countries of the world. Its many hundreds of miles of sea coast, indented with harbors, coupled with the possession of immense areas of splendid forest growth, created the conditions for a shipbuilding industry, which, until a generation ago, was one of almost unchecked progress and development. A hundred towns grew up within sight of the sea, each possessing shipyards and a population employed in either building, repairing, outfitting, owning, or sailing vessels. Our flag became known in all seas, and Canada assumed a place as one of the four great ship-owning countries of the world.

The advent of steel shipbuilding struck a fatal blow at this great source of our wealth and prosperity.

The increase in the size of vessels from 2,000 tons to 20,000 tons, made possible by the use of steel, added to greater durability and lessened insurance, effected such a reduction in the rates of ocean freights that wooden ships could no longer compete, and shipbuilding was transferred to British yards, where iron, coal, skilled labor and capital were cheaper than in any other country. The loss of business, capital, income and employment, in which at least one-fourth of the people were interested, is one from which Eastern Canada has not yet recovered.



Ships that should be built in Canada.

Natural products of the soil, sea, mine, and forest can only be made valuable by adequate transportation facilities. The two countries possessing the most extensive and highly developed transportation systems are Great Britain and the United States. (Note 1.)

American Domestic and British Foreign Trade Similar.

It is important to note the analogy that exists between the inland trade of the United States and the water-borne trade of Britain. Each owes its existence to the fostering and protective care of its respective Government.

The construction of the Erie Canal, followed later by railway extension, opened up the vast solitudes beyond the Alleghanies and Mississippi to settlement and trade. In 1850 the Washington Government subsidized a trunk line from Lake Michigan to the Gulf of Mexico with a land grant six miles square for every mile built. Every State west of the Mississippi and five east of it are indebted to land grants for initiating the construction of railways. The Union and Central Pacific Railways received twenty square miles of land grant for every mile built, and in addition a loan of sixty-two millions of dollars. United States is now expending over $19,000,000 annually on harbor and river improvements—largely to promote inland transportation. The Erie Canal is now being deepened a second time at a cost of $100,000. Improvement schemes, involving an expenditure, in all, of $400,000,000, have been approved by the Government experts at Washington, and are awaiting appropriations.

Parallel with these huge expenditures, made or contemplated for transportation purposes, Britain's colonial and foreign trade was also supported by like means. She did not establish her supremacy as the great ocean carrier of modern times on free trade lines. On the contrary, the British Government subsidized its main line of steamers "to afford a rapid, frequent and punctual communication with their distant ports which feed the main arteries of British commerce." [Parliamentary Report on Contract Packets, 1853.]

Britain pays over a million pounds a year in subventions to steamship lines. When next year the Cunard Co. puts its two 25-knot flyers on the Atlantic and receives £150,000 annual subsidy, the total payments made by the British Government to shipping companies will be £1,127,145 sterling. Of this sum £860,000 is for mail service, £200,000 for admiralty subventions, as payment for holding vessels at the service of the Government in time of war, and £40,000 to the Elder-Dempster line to Jamaica, to encourage the fruit trade. The companies receiving them, look upon them as very valuable aids to their respective enterprises and use them for the purpose of pushing and extending their lines. Rapid postal communication has mainly followed lines of great commercial traffic, and to this extent British postal subsidies are paid for the assistance of trade. But for these subsides many of the shipping companies could not keep up the competition. Sir Thomas Sutherland, president of the Peninsular and Oriental Company, which receives an annual subsidy of £350,000 sterling, made a statement recently that his company could build vessels for £10 per ton, but in consequence of the conditions imposed by the

Note 1.—The American railways represent an investment of over $10,000,000,000 and an earning power of over $600,000,000. British ships represent a capital investment of $750,000,000 and earning power of $450,000,000.

Government they cost £30 per ton. The magnificent vessels thus created are potent agencies in pushing freight and passenger business. The Cunard Company receives a trifle over 1 per cent. in subsidy, and its dividends for eight years have averaged only 2 per cent. Could any statement be stronger than this as to the value of public subsidy, without which the Cunard and many other of the great ocean lines would have no existence?

Importance of Cheap Transportation.

A second point of analogy between these contrasted countries is the cheapness with which products are carried from the country where they originate to the place of consumption. Cheapness in transportation is a factor in the progress and prosperity of any country, second only to the possession of natural or manufactured products to be marketed. (Note 2.)

The parallel between the two countries might be carried still further to show that the internal transportation facilities of Britain and the foreign transportation facilities of the United States (Note 3) have both been neglected by their respective Governments; both have maintained excessively high rates, in the one case to the disadvantage of the English consumer, and in the other to the loss of the American shipper . (Note 4.)

At the present time very considerable activity exists in the Great Lakes and coastwise shipbuilding trades of the United States. During the last fiscal year the gross tonnage built was 418,745. Of those on the seaboard, only three steamers of 15,344 tons were built, and ten vessels of 16,681 tons for river and bay service. Forty vessels of 32,366 tons were built on the Great Lakes. It is believed that 600,000 tons will be built next year.

The small part taken by United States vessels in their foreign carrying trade is shown from the summary of vessels entered from foreign countries in 1905:—

American vessels	4,120,187 tons
Foreign "	20,673,112 "
Total	24,793,299 "

United States Ship Subsidy Bill.

A measure was projected in the United States to levy discriminating duties on imports in foreign bottoms. In 1904 a Commission of Congress investigated it and reported against it on the following grounds:—

1st. Treaties with thirty (30) foreign Governments forbade it.

2nd. Retaliation would result, to the injury of American interests.

3rd. Forty per cent. of value and sixty per cent. to seventy per cent. of bulk of American imports were on free list. This list would have to be abolished, leading to higher prices.

In place of this project the Commission drafted a bill, which has now been before the Congress a year. It was adopted by the Senate, but was rejected by the Lower House. The indications are that the Administration will use its influence to secure its passage. Its preamble states it is to create a force of naval volunteers, to establish American ocean mail lines to foreign markets, and to promote commerce. The first section provides for the enrollment of a naval reserve from the merchant marine by payment of annual retainers. Second section provides for the payment to the owners of any vessels built hereinafter and registered in United States engaged exclusively as a common carrier five dollars per gross ton if engaged in foreign trade or deep

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Note 2.—Freight rates on wheat from Chicago to New York show the following reductions per bushel:—

Year.	Lake and Canal. Cts.	Lake and Rail. Cts.	All Rail. Cts.
1868	22.79	29.	42.6
1905	5.51	6.44	10.20

The cost of transportation of wheat from Chicago to Buffalo decreased from 9.89 cents per bushel in 1860 to 1.32 cents in 1905. Senator Frye, chairman of the National Waterways Commission, reported in 1892:—

"A diminution of one mill per ton per mile freight on United States railways effects a saving of $100,000,000 to shippers."

Mulhall states the cost of transporting one ton of freight one mile, in cents, is as follows:—

United Kingdom	$2 80
Italy	2 50
Russia	2 40
France	2 20
Germany	1 64
Belgium	1 60
Holland	1 56
United States	0 80

The tonnage of Pittsburgh, owing to cheap carriage of coal and iron, has come to exceed that of any port in the world. In 1902, the rail and river shipments exceeded 86,000,000 tons, the water shipments 11,000,000 tons, or more than either London or New York.

Ocean rates have also been reduced as follows:—

Grain from St. Louis to Liverpool per bushel—

1882	22.66 cts.	23.66 cts.
1905	10.00 "	16.62 "

Chicago to Liverpool:

1896	$0.335
1905	0.1916

New York to Liverpool:

1864	3,3/16 pence
1905	1,3/8 "

Note 3.—From 1884 to 1904 the protected coastwise steam tonnage of the United States increased 161 per cent. and sail vessels 20 per cent., the decrease in shipping being in foreign carrying vessels.

The construction of the Panama Canal gives great possibilities to the American coasting trade, which is jealously guarded as an exclusive reservation for American built vessels.

On the other hand, American foreign carrying trade has passed into the hands of foreigners. American vessels engaged in it:—

1861	2,642,628 tons
1905	954,513 "

Note 4.—It costs $3 to carry a ton of coal in an American bottom from Newport News to a Mediterranean port; it costs $1 from Wales to the same port. The foreign shipping industry in the United States is in a constant state of bankruptcy, receiverships and reorganizations. Nearly $100,000,000 invested in shipbuilding yields no interest.

sea fisheries for one year; four dollars for nine months, two dollars and fifty cents for six months; such vessel can be taken by the Government; carry mails free; one-sixth of crew shall be citizens of United States. This contract may be renewable yearly for ten years. In addition, the bill also provides liberal subvention to steamship lines.

All Maritime Countries Protect Their Shipping.

The countries of Continental Europe have been equally solicitous as Britain and United States to promote a foreign carrying trade. Germany, eager to create a mercantile marine as the basis of a navy, has established a scientific subsidy system, whereby differential rates on railways are applied to overseas traffic on German bottoms. The cash subsidies to the North German Lloyds and Hamburg American lines by the Government amounts to about nine per cent. on the capital invested. The former, receiving £280,000 per annum subsidy, has had established for some time a line of steamers between Manchester and German ports, taking the business formerly carried on by Liverpool liners, and on the East coast a steady increase of trade by German steamers takes place to Hamburg and Bremen. The Massageries Maritime Company have established a line, operating from London. German steamers have largely supplanted British ones in the British East African trade. France is equally in earnest to maintain a commercial position on the seas, and spends large sums for this purpose. She expends over a million and a half pounds annually on a tonnage valued at only £12,000,000 sterling. Russia has a subsidized volunteer fleet; Austria gives "trip" bounties and shipbuilding subsidies; Holland largely endows shipping companies running lines to its colonies; and Japan, not behind her European compeers, has organized its great Nippon Yusan Kaisha, a domestic shipbuilding organization, established at the public expense, and whose lines of traffic in the East are already supplanting those of Europe. Austria pays more than £300,000 subsidies for a mercantile marine of less than 200,000 tons. Within a short period the Norwegian Government has subsidized a line of steamers to Newcastle, displacing the Wilson line, which had done the service for fifty years. Italy has also subsidized her mercantile marine, and her vessels have monopolized the iron ore trade at Almira.

To summarize, the following figures are given as approximately correct as the subsidies and bounties annually paid:—

Spain	$1,500,000
Japan	3,000,000
Italy	2,750,000
Britain	5,500,000
Germany	1,800,000
Austria	1,600,000
France	7,500,000

Note the results:—

Japan's steam tonnage increased from 123,000 tons in 1890 to 646,000 in 1904; England from 8,000,000 to 12,000,000; Germany, from 900,000 to 2,900,000; France, 800,000 to 1,200,000 tons.

The vessels built in the British yards have averaged for a number of years 750,000 tons for domestic purposes, and 150,000 tons for foreign. The total net tonnage of the United Kingdom in 1904 was 10,557,520; of the Empire, 12,156,101 tons.

Decadence of Canadian Shipping.

In contrast with progress made by continental nations, by England and the United States, in their inland and coastwise transportation, the decadence of Canadian shipping interests is a lamentable fact. Instead of being the fourth ship-owning country, she is now the eleventh. Our registered tonnage has decreased from 1,333,015 tons in 1878 to 672,838 tons in 1904, notwithstanding the wonderful expansion of our trade. The tonnage built decreased from 183,010 tons in 1874 to 33,192 tons in 1904.

The water-borne traffic of Canada is made up of seagoing tonnage, Great Lakes' shipping, and coastwise vessels. Of the 15,800,000 seagoing tonnage in and out, Canada could claim less than two millions of tons, or about twelve per cent. only. Under United States' flag there were three million five hundred tons, or about 75 per cent. more than Canada possesses of her own trade. (Note 6.)

Tonnage on the Lakes.

The traffic on the Great Lakes between Canada and United States, in 1904, was about equally divided. The inaccessibility of the lakes to ocean tonnage operated as a protection to Canadian vessels from the competition of British builders, and Canada has been better able to retain her own business.

Great Lakes' tonnage, 1904, shows as follows:—

	Canadian.	United States.
Arrived	4,494,324	3,628,515
Departed	3,481,163	4,771,498
Total	7,975,487	7,400,013

The increase of this tonnage since 1868 has been eighty-three per cent.

The coastwise trade of Canada has made amazing progress between 1876 and 1904, the increase being from ten millions to forty-five millions of tons.

Of this tonnage in 1904 the following are the nationalities:—

	Tons.
British	42,938,396
Foreign	2,566,726
Total	45,505,122

The foreign tonnage increased from 1,556,252 tons in 1903, being an increase of about one million tons in one year.

Note 6.—The total seagoing tonnage entered in and out:

1876	5,914,764
1904	15,826,705

The changes in flag are as striking as the increase in tonnage:

	1876.	1904.
British	1,896,603	8,046,817
Canadian	1,634,333	1,979,803
Foreign	2,379,828	5,801,085
Total	5,914,764	15,826,705

Thus out of 15,826,705 tons, Canada could claim only 1,968,803 tons of the foreign tonnage; the United States claimed 3,524,497 tons.

Since the period 1874-8 to 1904, the percentage of each nationality has varied as follows:

British	49.6 to 58.4
Foreign	32.2 to 30.4
Canadian	17.9 to 11.2

The coasting trade of Canada is regulated by the Act, Chap. 83, Revised Statutes, which enacts that no goods or passengers can be carried from one port in Canada to another except in British ships. This has been modified by Order-in-Council, admitting vessels of Italy, Germany, the Netherlands, Sweden, Norway, Austria-Hungary, Denmark, Belgium, and the Argentine Republic to our coastwise trade in exchange for like privileges granted by them.

Norway has long carried a large portion of our trans-Atlantic lumber shipments. Of late years she has succeeded in making her way into our coastwise trade. Her vessels have about all the advantages of our local shipping, and some that we do not possess. Last year, over 1,200,000 tons of coal were carried from Cape Breton up the St. Lawrence under the Norwegian flag.

Steel Shipbuilding in Canada.

An attempt has been made to meet the new conditions of shipbuilding created by the use of steel by the establishment of steel shipbuilding yards in Canada, and five companies, besides some smaller firms, have been doing business, viz. :—

Algoma Steel Co., Limited, Sault Ste. Marie.
Canada Iron Furnace Co., Limited, Montreal.
Collingwood Shipbuilding Co.
Bertram Engine Works, Toronto.
Canadian Shipbuilding Co., Toronto.

While these yards are not closed, they are practically idle, and serve to demonstrate the fact that under present conditions of competition with the British builders the industry cannot make any progress in Canada. The Imperial Merchant's Shipping Act being in operation in Canada, no tariff discrimination can be exercised in favor of our own shipping, such as is enjoyed by other industries, and, therefore, a bonus on the tonnage built seems the only practical method of assisting in the resuscitation of this business.

While the Canadian people have adopted the policy of protecting and supporting home industries, it seems an anomaly that the shipping interests alone should be neglected and left to suffer entire extinction from the protected competition of other countries. A policy that has been successful in building up the workshops and factories of Canada, and that after trial has received the ample endorsement of the people at the polls ought to have been extended to the shipyards, and afforded a continuance of the employment of labor and capital that formerly made our shipping a source of prosperity and wealth.

Bonus Necessary.

No good reason exists why Canada should not build her own ships and do her own carrying trade. The policy of abandoning our merchant marine to its fate; of allowing our seafaring population to drift away into other employments; of permitting other countries to enjoy the profits and prestige of doing our ocean carrying, is not one that can commend itself to the progressive spirit of our people.

About $70,000,000 of Canadian capital, within a few years, have been expended in Cape Breton in the development of coal and iron. Many millions have been invested at Sault Ste. Marie in steel production. The erection of steel shipbuilding works is a fitting supplement and crowning measure to the establishment of great coal, iron and steel-producing industries. The latter completes a series of conditions required in steel shipbuilding, such as exist in the great shipbuilding centres in Great Britain.

The fisheries are demanding more and more steam vessels. Harbor, river and coast improvements are requiring more dredges. The Government marine service necessitates new steamers. The coastwise business of the country is developing into regular steam packet lines. The influx of population into the North-West, the development of the grain-growing sections demand rapidly increasing steam tonnage on the Great Lakes. Shall Canadian skill, labor and capital have an opportunity of employment in the development of and the profits in this growing business, or shall it be left to the enterprise of outside people?

Canada possesses extensive coal deposits at tide water which afford a marine traffic of over four millions of tons; she ships a million thousand feet of lumber products annually; her export of grain, rapidly increasing, will soon reach a hundred millions of bushels. Of other products Canada has hundreds of thousands of tons to export. In addition to providing this enormous trade for a shipping business Canada has excavated canals, deepened rivers, dredged harbors, erected docks, buoyed and lit the entrance to all our waterways, and, in short, created the business, the facilities and conditions demanded by a maritime power, and then stopped short without taking one effective step to bring into being the thing itself—a mercantile marine.

SCIENTIFIC NOTES.

Force of Water.

The effect of the hydraulic motor, which is now used for the purpose of removing masses of earth, almost passes belief. A stream of water issuing from a pipe six inches in diameter, with a fall behind it of 375 feet will carry away a solid rock weighing a ton or more to a distance of fifty or a hundred feet. The velocity of the stream is terrific, and the column of water projected is so solid that if a crowbar or other heavy object be thrust against it the impinging object will be hurled a considerable distance. By this stream of water a man would be instantly killed if he came in contact with it even at a distance of a couple of hundred feet. At 200 feet from the nozzle of a six inch stream, with a 375 foot fall, projected momentarily against the trunk of a tree will in a second denude it of the heaviest bark as cleanly as if it had been cut with an axe. Whenever such a stream is turned against a bank it cuts and burrows it in every direction, hollowing out great caves and causing tons of earth to melt and fall and be washed away in the sluices.

A New Canadian Alloy.

A new metal called monel, which is expected to cause something of a revolution in the industrial world, is being produced at the works of the Canadian Copper Company at Sudbury. It consists of a compound of copper, nickel, iron, and one or two other minerals, which are found in the district, and its importance lies in the fact that it is much less costly than nickel, is less liable to rust, and will serve all the purposes that are served by that metal in the industrial world. The new metal is said to be of equal ductile strength with nickel, and to possess all its other essential qualities, but it is not claimed that it would serve the purpose of nickel steel, used as armour plate. The alloy is the result of experiments by Mr. F. H. Clergue and his assistant, Mr. Sjostedt.

GUARDIANS OF MONTREAL'S HARBOR.

ON January 1st, a new Board of Harbor Commissioners for the port of Montreal entered upon office. The importance of this harbor to the whole transportation system of Canada makes it essential that it be handled by alert and able men. An enormous amount of tonnage passes annually through this ocean port, which is, as it were, cast in the middle of a continent. Every mile of railroad which is built in the West, every lake boat which is put in commission on the lakes, increases the volume of the port's business.

Have the facilities for handling traffic in the harbor increased with the increase in business offering? That is the question for the consideration of the new Commissioners. Much has been done in recent years to better the conditions obtaining in the harbor, but very much more remains to be done. More elevator accommodation, better appliances for transferring cargoes from boat to cars and vice versa, an adequate dry dock, these are some of the more pressing requirements.

The new Board will commend itself to the business interests of the country. The Chairman, Major Geo. W. Stephens, is a man of fine business ability. Although still a comparatively young man, he has attained a high position in the business world. He is President of the Canadian Rubber Company, and Vice-President of the Canadian Consolidated Rubber Company. He is also one of the largest holders of real estate in Montreal. He was elected by acclamation to the Provincial Legislature, for the St. Lawrence division, at the last bye-election. His energy and forcefulness assure a progressive regime in the commissionership.



MAJOR GEO. W. STEPHENS
(Canadian Rubber Co., Ltd.)
CHAIRMAN BOARD OF HARBOR COMMISSIONERS FOR MONTREAL.

Mr. C. C. Ballantyne, the second Commissioner, needs no introduction to the readers of INDUSTRIAL CANADA. His work for the Sherwin-Williams Co., has placed him in the front rank of Canadian business men. His interests are widespread. Particularly effective has been his work for the Canadian Manufacturers' Association, over which he presided last year as chief officer. He can be relied upon to give a useful and energetic service to the harbor work of Montreal.

The third Commissioner is Mr. L. E. Geoffrion, a man who stands high in the commercial field. As a partner in the wholesale grocery firm of Chaput, Fils et Cie., he is known as a successful business man. He has attained the honor of the presidency of the Chambre de Commerce, and has represented that body on the Board of Harbor Commissioners under its old organization. He has always taken a live interest in public affairs, and he completes a trio who are big enough to handle the big work which they will be called upon to do.

The words of the royal commissioners on transportation in their report of a year ago are worthy of reproduction. They should serve as the basis of future work. "The city of Montreal, situated as it is at the head of ocean navigation, and at the foot of western canal navigation, and being the centre towards which all Canadian transcontinental lines of railway gravitate, occupies a unique position in the transportation system of Canada. It is, and should be treated as, the chief Atlantic summer port of the Dominion, and as such the interests of the nation should always be paramount, and be the governing principle in the administration and improvement of the port. Its harbor should be controlled by the Government, and laid out on broad lines with a view to the transportation needs of the future of the nation as a whole, due regard being had also to local needs."

THE TRADE OF MONTREAL.

The immense trade done through the port of Montreal is shown in a report of the export trade for 1906, issued by "The Gazette," of that city. As an introduction is given a statement of the foreign trade of all Canada, showing the growth from year to year, classified under various headings. This provides a concise and handy summary of our commerce, and is invaluable for ready reference.

Considerable space is given to the shipping trade. The great ocean port of Montreal has many lines running to it, and the handling of its freight is becoming annually more important. The article is amply illustrated with cuts of ocean steamships, grain elevators, and appliances for handling freight.

After this follows very complete reports of the cheese, butter, egg, grain, flour, provision, lumber, hay, cattle, sheep, apple, and other business of the country. All these subjects are dealt with in a complete and exhaustive manner, which makes the book of great value to those who are studying the growth of the country.

AN INDUSTRY THREATENED.

Discussing the boot and shoe trade of Quebec a Western merchant recently uttered some great truths. The interview is quoted from the "Quebec Chronicle," and goes to show the evil effect that excessive labor exactions have on an industrial community.

"Before many years you, Quebecers, will wake up to find that you have killed the goose that has been laying so many golden eggs for you—that your boot and shoe trade has entirely passed away from you. As it is, it is drifting away from you rapidly. At present you have hardly more than nineteen or twenty shoe factories running in Quebec where you had thirty-five to my own knowledge eight or nine years ago. True, some of your principal establishments have enlarged their capacity, but their output to-day is not anywhere what it should or could be. This is not due to dullness in the Canadian shoe market. On the contrary the demand for boots and shoes has greatly increased and is constantly increasing with the growth and prosperity of our population, especially in the North-West. In fact, the supply can hardly keep pace with the demand.

"But the country looks no longer to Quebec as the chief source of that supply. The fault of this is your own in allowing the industry to be handicapped and constantly obstructed by the short-sighted, suicidal policy of your local labor unions, their endless as well as ruinous, exactions, and their repeated strikes. Any advantages that Quebec enjoyed over other centres in the matter of this industry, have disappeared long ago. Too frequent disappointments and delays in filling outside orders, occasioned by the constantly recurring labor difficulties here, have provoked the establishment of many shoe factories in other parts of the country, especially in Ontario, which are cutting into your trade at a most alarming rate, and before long will take what remains of it away from you. Their greater proximity, too, to the chief markets, their superiority as more central distributing points, and steadier conditions in every respect give them advantages over you now against which you cannot long hope to compete successfully. Why, I know of one factory alone in Hamilton which is now turning out daily, more than double your largest establishment's output in its busiest and palmiest days. In fact, unless you can make boots in Quebec cheaper and better than they can be made elsewhere, unless you get back very soon to something like the old conditions when a manufacturer was the master of his own establishment and his own business, to run these to the best advantage, you may take it for granted that the industry in Quebec will before long be left with little or nothing to cater for but a local trade. Indeed, so hopeless are many of those interested in it of any improvement in the situation or the outlook that only their heavy investments in local buildings and plants keep them from moving away to more promising centres."

A VALUABLE EXPORT MARKET.

An interesting report is published by the Government from the Commercial Agent in Mexico. Mexico imports over $100,000,000 worth of goods a year. So far only a small part of this comes from Canada. Better steamship service is now assured so that it is worth considering carefully the market.

"Canadian manufacturers, who are really desirous of obtaining a foothold in this market, or throughout Spanish-America, would do well to make a careful study of the needs of the market rather than try to convert so many people to the use of goods as supplied to the home trade. The axe is a case in point. The natives of Spanish-America have never been converted to the use of an axe of the shape and weight of that used in Canada and the United States. The result is that the Collins axe, made to suit the trade here, is sold by the thousand, whereas, had the firm failed to give the article asked for a very profitable business would have been lost."

Trade Between Canada and Mexico.

"While trade between these countries is in its infancy, yet it is during that very period of infancy that the foundation should be laid for a large future trade. Canada is looked upon by Mexico as a friendly neighbor. Canadians have no ancient history to be overcome, no political differences of past years for time to heal. Let Canadian merchants and manufacturers resolve now, from the beginning, to build up a trade by delivering good quality and in every way extending just and fair treatment to their customers here and their efforts cannot but meet with success. Let them fail in this through apathy or carelessness or from the mistaken idea that Mexico is a long way from home and that anything is good enough to send to this market and the result will be no less in doubt. It will be spelled in the letters that go to make up the word 'failure.'"

"And though this trade is yet in its infant stage I am unwillingly forced to state that some shippers have already been led into the folly of the mistake against which I caution. I do not wish to turn preacher or continually to offer criticisms, but I would suggest that any, who, from personal motives, do not hesitate to send out an inferior article should, at least from patriotic motives, refuse to do so, for one shipment of inferior goods can do more harm to Canadian prestige, at this tentative stage, than can be counteracted by ten of prime quality. Were Canadians and Canadian goods well known in this market the damage would not be so great for the buyer would simply transfer his trade to another firm, but as the matter stands at present Canadian methods and Canadian goods are condemned in one broad condemnation."

"Imports from Canada during this time, while not large, show a decided increase over the year previous, when they were but $26,195, the percentage increase being more than five hundred. The same may be said of exports from here to Canada, which show a gain from $16,750 to $104,168, or more than six hundred per cent., and during the first year after the establishment of direct steamship service."

Letters from Canada Insufficiently Stamped.

"Very frequently," writes Mr. C. E. Sontum, Canada's Commercial Agent in Norway, "I receive from Canadian firms, especially from those not doing regular business here letters that are not sufficiently stamped, and which consequently I have to redeem with double the required postage. In most cases these letters contain besides a sheet or so in writing, a bunch of price-lists or other printed matter, which, of course, might have been sent separately as printed matter. Frequently also these letters come from Canadian firms with only a 2-cent stamp on, while the postage on a letter of regular weight is 5 cents.

"So far I have redeemed all such mail from Canada, but as lately with the increasing correspondence I am receiving from Canada, my outlays in this connection have reached rather large dimensions, I hereby respectfully call your attention to the matter. Possibly your department could make this known to the manufacturers and exporters of Canada. Very likely in many instances it is only a fault of the clerks who mail the letters."

FOREIGN TRADE NOTES

A MARKET FOR CEMENT.

Manufacturers of cement will be interested in a report on the subject by the United States consul at Pretoria. He shows that there is a very large demand for cement in South Africa. At present Great Britain supplies most of the demand, but Canadian exporters would secure the same preference, and the market is worth investigating. The report is as follows:—

"Since the British occupation here, South Africa has presented one of the very best markets in the world for cement because of the new life infused in the country through the Public Works Department of the various colonies, including harbor extensions, railway building, sanitary projects, cold storage concerns, and the like. Business blocks have been added to all the cities, in which cement has entered to a large degree, an outside veneering always being added to the brick interior both in dwellings and office buildings. It is not surprising, therefore, that during the past few years the importations of the product have not fallen much below $1,000,000; in fact 1903, the banner year in all importations, records $2,500,000 worth of cement, while 1904 was but little behind that record. In that competition America cut but little figure, shipping to the Transvaal less than $400 worth in 1903, and about double that amount the following year, while Germany's contribution during the same period was $341,875 and $529,800, respectively, England following with $217,725 and $252,325 for those two years."

Great Britain Leads the Market.

"Before 1898 the United Kingdom furnished the bulk of the cement imported, but with the subsidizing of steamship lines and cheap rates to seaports in the Fatherland, Germany entered the South African field that year and captured 16 per cent. of the total imports. Four years later, Belgium and Denmark entered the lists, when the position of the principal competitors stood as follows:—United Kingdom, 43.4 per cent.; Germany, 37.2; Belgium, 18; while the remaining 1.4 was divided between Denmark and other European countries, the United States not figuring at all. In 1903 other nations, viz., Austria, France, Italy, Holland, and Sweden, took part in the competition and captured part of the trade of Germany. Great Britain increased to 51.4 per cent., and Germany dropped to 23 per cent. America, in the meantime, had sold in the neighborhood of $400 worth in that twelvemonth—a poor showing. From that time, however, the United Kingdom has been gradually increasing its hold, and advanced from 70 per cent. in 1904 to approximately 90 per cent. last year, of the total imports, while Germany decreased nearly to its standing in 1898."

"The British affirm that their hold on the market is due to the firm and united action of their manufacturers, to the uniform quality of their product, and also, to some extent, to the customs preference, the last-named reason probably furnishing the greatest impetus to their trade, though they claim that the subsidized steamship lines of the Germans make up for the preferential tariff."

Trade With South Africa.

Writing from South Africa to the Department of Trade and Commerce on the possibilities for trade between Canada and South Africa, Mr. W. T. R. Preston says:

"It needs but a cursory acquaintance with the commercial situation to convince one that a good market exists here for Canadian products. This is due in the first place to a strong imperial sentiment, and secondly to a belief that Canadian goods if placed on the market will be of good quality. On several occasions I have come in direct contact with the force of the sentiment to deal with Great Britain and the colonies in preference to any other country.

"I am not clear in how far manufacturers or traders in Canada are aware of the conditions under which so-called manufacturers' agencies are carried on in South Africa. A manufacturer's agent doing business throughout the various British South African colonies must pay license fees for the privilege of doing business in this country aggregating about $600 per annum. When these agents represent British houses the general business is done on commission, the commission is supplemented by an amount agreed upon to assist in covering the general expenses of the agent. This is found to be necessary in view of the fact that traveling with samples is expensive. This view has been brought to my attention by a very prominent general agency."

Telephone Instruments for Australia.

An opening for Canadian manufacturers of telephone apparatus is reported by the Canadian Commercial Agent to Australia. The Postmaster-General of Australia will shortly invite tenders for some 9,000 telephone instruments of a modern type which are required for the State of Victoria alone. Complete specifications of the particular requirements of the Department have been forwarded by mail to the office of the Superintendent of Commercial Agencies, Ottawa, where interested manufacturers can refer to them. The specifications vary a little in several of the states, but the Victorian requirements of telephonic material are—in the main—similar to those of the entire Commonwealth. During 1907, the Australian Government purposes importing large supplies of telephone material.

A Market in Mexico.

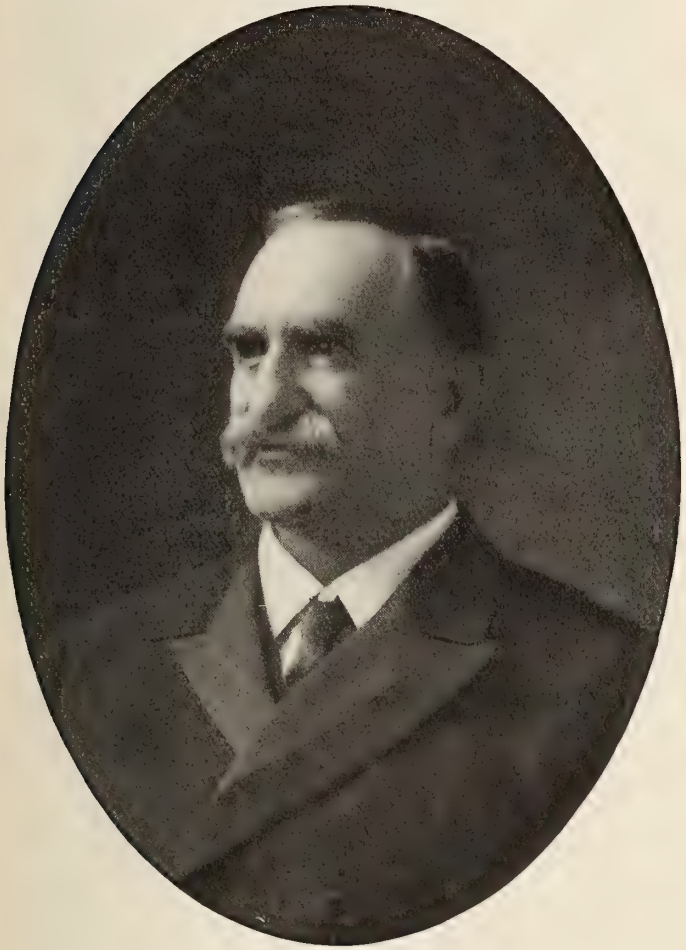
Canada's commercial agent in Mexico, A. W. Donley, reports to the Department of Trade and Commerce that 1906 was Mexico's best year both for exports and imports. There was an increase in the exports of $31,000,000 and imports over $21,000,000. The development of trade during the past ten years has been something marvellous. About 68 per cent. of the imports came from the United States, and 68 per cent. of the exports found a market in the United States. Germany is the only European country that seems to be making any headway in supplying the Mexican market. Britain has practically withdrawn from the field and in its place the Spaniards are now controlling the importing houses. Germany and France are willing to meet the views of the Mexican market, whereas the British manufacturer thinks he knows what is best for the Mexican. Mr. Donley wants the Canadian manufacturer to cultivate the Mexican market.

As a result of recent legislation a New York firm are offering denatured alcohol at "not to exceed 50 cents per gallon." They expect to sell it for much less than this.

TRADE REPRESENTATIVES DINED.

Mr. Richard Grigg, Commissioner of the British Board of Trade, and Mr. Graham Gow, Commissioner of the New Zealand Government, were the guests at a dinner given by the members of the Canadian Manufacturers' Association at Toronto on Tuesday evening, January 15th. The gathering was a striking illustration of the immense extent of the Empire, of which we are a part. From the Motherland came one to tell of the efforts being put forth in Great Britain to develop trade with Canada; from New Zealand, so far to the west that its summer coincides with our winter, was present another to cement Imperial trade relations.

Mr. Harry Cockshutt presided over the dinner, and with him at the head table were Mr. Grigg, Mr. Gow, Mr. Peleg Howland, President of the Toronto Board of Trade, and Mr. John Firstbrook, Chairman of the Toronto Branch, C.M.A. Representatives from various parts of Canada, besides many from Toronto, enjoyed the menu and profited by the business talks that followed.



MR. GRAHAM GOW
New Zealand's Trade Representative in Canada.

The Chairman, in proposing the toast of "The King," spoke of the greatness of the Empire and the future of Canada. He pointed out the significance of the present meeting and the boundless possibilities for trade which were opened up. On behalf of the Association he welcomed the guests, and offered them every facility which the members could supply for the successful carrying out of their mission.

Mr. Grigg returned thanks for the kindly reception which he had received since he first landed in Canada. His mission was one which, he hoped, would result in a closer trade relationship between the Motherland and colony. The people of Great Britain were greatly interested in Canada. Her immense natural resources and her energy and optimism in developing them filled the Old Country with pride and admiration. He closed by quoting a stanza from Kipling's Recessional.

Mr. Gow spoke enthusiastically about New Zealand. He outlined many of the conditions which obtained there, but which were only being thought of yet in other countries. He showed the prosperity of the people and the great amount of their foreign trade. He then went into a specific statement of the lines of trade which could be carried on between Canada and New Zealand. Fibres for rope-making and wool are now imported indirectly through England. He believed that these could be brought in advantageously direct from New Zealand.

New Zealand granted a preference to Canadian imports, and Canada should supply much that was wanted from abroad. Heretofore but a small percentage of the imports came from Canada. A regular steamship line ran from Canada to New Zealand. The people there were anxious to trade with this country. Now was the time to get in and secure a fair share of the market.

The International Exhibition at Christchurch was providing a fine opportunity for getting into contact with the markets of New Zealand. Many Canadian manufacturers were exhibiting there. He hoped that our trade would grow to the mutual advantage of both countries. Mr. Gow's practical talk was closely followed and greatly enjoyed by all present.

Following Mr. Gow, Mr. Peleg Howland, Mr. Firstbrook, and Mr. Hutchings, of Winnipeg, spoke. The latter gave a most interesting account of the growth of the Canadian West from the time, but a few years ago, when practically all the population was centred in Manitoba, and it was a long trip by horses from Winnipeg to Edmonton, to the present time, when railways stretch out in every direction and towns are dotted over the entire country.

An informal discussion of trade conditions followed the speeches.

Hamilton Companies Amalgamate.

It is officially announced that an amalgamation of two of Hamilton's largest industries has been arranged between the Canada Screw Company and the Ontario Tack Company, under the name of Canada Screw Company, Limited. These two companies have been long established, the Screw Company since 1866, and the Tack Company since 1887. It is the intention of the consolidated companies to extend their buildings and plant very largely, and add other lines to their already extensive products. A new charter has been applied for, very materially increasing the capital stock to cover the large extensions that have been decided upon, and when issued the Board of Directors will be: Cyrus A. Birge, Charles Alexander, F. H. Whitton, Hon. Senator Gibson, Chas. S. Wilcox, Jas. Orr Callaghan, W. F. Coote.

The Executive Officers will be: Cyrus A. Birge, president; Chas. Alexander, vice-president; F. H. Whitton, general manager; W. F. Coote, secretary-and treasurer; Jas. Orr Callaghan, director of works.

—Oldfield, Kirby & Gardner have issued an attractive calendar to their friends.

STEEL SMELTING BY ELECTRICITY

Interesting Developments in Recent Experiments.

IN view of the experiments recently carried out in Canada to test the possibility of the electric smelting of iron ores, an exhibition recently given by the corporation of the city of Sheffield to show how far electricity could be used in metal working, will be of general interest. Among other devices shown was a small model of the Grongal Kjellin induction furnace. The results are told by United States Consul Daniels as follows:—

This particular furnace was built to melt platinum, but during the exhibition was daily used to produce small ingots of steel, and at the close of the exhibition was taken to the National Physical Laboratory at London. On December 3rd a member of the Kjellin Company lectured before the Sheffield Society of Engineers and Metallurgists at the department of applied science, University of Sheffield, upon the subject of steel making in electric furnaces.

Sheffield steel makers have been so often told that the days of best Sheffield crucible cast steel, made by the methods they are thoroughly familiar with, were past, that they expected this lecture to be a reproduction of that statement, but the lecturer made no such extravagant claims. He began by referring to the three well-known principles of electric smelting—i.e., heating the charges by the electric arc, by internal resistance, or by induction. He described the arrangement for melting by induction, the principle adopted in the Kjellin furnace. Having pointed out that the furnace is simply a melting furnace, the lecturer gave a brief technical description of the Kjellin furnace. Currents are induced in a magnetic field by means of the primary circuit, maintained by an alternating current of high frequency, and this arrangement forms and maintains by induction a secondary circuit in the molten charge itself, disposed as this is in an annular crucible around the magnetic field. The charge offers high resistance, and accordingly melts. There are various modifications of the arrangement of the primary circuit and magnetic field in the different types of furnace, but the principle is the same in all induction apparatus.

Misleading Claims.

Having disposed of the technical description of the furnace, the lecturer asked in what way the induction furnace might be most successfully used. Everyone was familiar with the frequently made assertion that the furnace, or, indeed, any type of electric furnace, could produce high-grade crucible steel from inferior material or even direct from iron ore, and that in consequence the crucible process was doomed. These statements were most misleading. It was true that impurities could be reduced, to a certain extent, in this furnace by adding "physic," and that rusty scrap iron could be properly reduced.

It was also true that high-class iron ore could be reduced to pig-iron by means of the induction furnace, but it must be clearly understood that for such work power must be so cheap that the process could only be carried out successfully in localities where power was to be had for next to nothing; at least the present state of the art had not proved a commercial success. The furnace was only a modified crucible furnace; high-grade raw material must now, as heretofore, be used to produce high-class steel. It was not commercially possible to make high-class steel from inferior material, laboratory assertions to the contrary notwithstanding; then, too, the difference in price between superior and ordinary raw material, as compared with the price of the final product, made this point one of minor importance.

Cost of Operating.

What the induction furnace would do was to permit of larger cast, a cheaper and cleaner form of melting, and reduced cost of labor. The demand for big crucible quality ingots was increasing day by day. Die ingots ranged up to two tons' weight, and the quality of steel must be perfectly regular and sound. Crank shafts and axles for motor cars necessitated the use of heavy crucible ingots. With few exceptions the crucible-steel makers were confronted with really practical difficulties in making large ingots.

The induction furnace solves this problem for them, for it is as easy to make a 2-ton charge in such a furnace as a 60-pound charge in a crucible. The saving in cost was easily demonstrated. Most steel makers agreed that the cost of melting one ton of crucible steel was from £7 to £8 ($34.07 to $38.93). In the induction furnace it required 800 to 850 units to a ton of steel and the cost in Sheffield would be from £2 to £2 2s. 6d. ($9.73 to $10.34) per ton. Two men and one boy would be able to run a furnace turning out 4 tons in twenty-four hours, so that the cost for labor should not exceed 7s. 6d. ($1.82) per ton.

The cost of lining, including repairs, should not exceed 2s. 6d. (51 cents) per ton; consequently the actual cost for melting one ton of steel should be well under £3 ($14.60); but if the cost was to run as high as 50 per cent. of the cost of melting in crucibles the induction furnace had a great claim for the consideration of steel melters.

In addition to freedom from injurious gases, which made it an exceptionally clean melting machine, the advantages to the men working it were considerable. There was no lifting of heavy crucibles, and tapping was easily done by tilting the furnace. The lining was not easily destroyed, and with small repairs would last from seven to eight weeks. He hoped he had been able to show that the induction furnace was capable of reducing the cost of production of crucible steel.

With regard to quality the steel made at Gysinge, Sweden, has been proved to equal the best tool steel, but the quality naturally depended upon the skill of the metallurgist and the purity of the raw materials used. There was no reason whatever to doubt that the best crucible steel could be made with the induction furnace unless it was proved that the impurities acquired by the steel melted in coke or gas-heated crucibles improved the quality of steel made in these crucibles.

Various Alloys Made—New Furnaces.

Tungsten and chrome steels, as well as other steel alloys, could easily be made, and nickel steel had also been successfully turned out. Several furnaces of this type had already been erected in different parts of the world. At Gysinge, Sweden, a furnace of 175 kilowatts had been in successful operation for the past five years, and two others were being constructed at Guldsmedhythan. In Germany two furnaces were being operated and three were being constructed, two of which were 750 kilowatts. In Switzerland a furnace of 450 kilowatts was now being worked, while another of 200 kilowatts was soon to be started in Spain. In England a furnace of 200 kilowatts was now at work and others were in course of construction.

In a discussion that followed, the lecturer stated that a considerable part of each charge, about one-third, must be left in the furnace so as not to break the ring. In originally starting the furnace it was customary to pour in some molten

scrap. Asked if the furnace had been used in melting nickel and the alloys forming German silver, the lecturer stated the higher the resistance the better the furnace would work; hence, as the resistance of nickel was high, he had no doubt it would melt well in the furnace. Brass had been successfully dealt with in the Kjellin furnace, and he had no doubt that nickel could be very economically treated by its use; there was no difficulty in melting even copper.

Manganese steel had been dealt with without trouble caused by its nonpermeability (to magnetism). Accidental failures of the current, if not prolonged beyond three or four hours, would not spoil a charge in the making. It had been proved feasible to make high steel with the furnace by placing charcoal in the crucible along with the metallic charge.

The discussion showed the opinion to be that the lecturer had demonstrated that high-grade steels could be made in the electric furnace, but not at present commercially. The question that arose, viz.:—Were the higher tempered steels made by this process equal or superior or worse than the best quality Sheffield crucible cast steel—is still open, and a committee of Sheffield experts has been appointed to investigate and compare the qualities of steel made by the Kjellin furnace with those of steel made by the standard processes.

SMOKE TALKS

By R. C. HARRIS.

SMOKE CAN BE PREVENTED.

IN my official capacity as Property Commissioner of the City of Toronto, charged with the administration of the smoke enactment, I preferred a request a short time since to the editor of this journal for permission to use its columns for a series of short "Smoke Talks," to the end that the manufacturer and steam user might have placed before them the practical and economic features of smoke prevention.

This article might be prefaced by a resume of early research and legislative enactment in Great Britain and Europe, pertinent to the question, but inasmuch as its value would be largely historical, and we are wholly concerned with present and future considerations, I shall confine myself to comparatively recent practice and experience, which is in reality based upon the experiment and attainment of many decades.

These articles will be published monthly under the above caption, if space permits, and it shall be my endeavor to make them terse, pithy, interesting, and I trust profitable, having regard for the practical rather than technical.

A Municipal Enactment.

On October 5, 1903, the Municipal Council of the City of Toronto, by virtue of power conferred by a general permissive Act of the Ontario Legislature, enacted the following by-law:—

I.

All manufacturers and others in the City of Toronto using combustible material to produce heat or power, and thereby creating smoke in such quantities as to foul the atmosphere, or that may be carried by the wind or otherwise to other shops, houses or premises to the inconvenience or injury of the neighboring premises or residents therein, shall have such chimney or other apparatus as shall consume the smoke, or prevent the same from fouling the atmosphere, or being carried by the wind or otherwise to other shops, houses or premises, to the inconvenience or injury of the neighboring premises or residents therein.

II.

Any person convicted of a breach of any of the provisions of this by-law shall forfeit and pay, at the discretion of the convicting magistrate, a penalty not exceeding (exclusive of costs) the sum of fifty dollars for each offence, and in default of payment of the said penalty and costs forthwith, the said penalty and costs, or costs only, may be levied by distress and sale of the goods and chattels of the offender, and in case of there being no distress found out of which such penalty can be levied, the convicting magistrate may commit the offender to the common goal of the City of Toronto, with or without hard labor, for any period not exceeding six calendar months, unless the said penalty and costs (if any), including the costs of the said distress and of the committal and conveyance of the offender to the said goal, are sooner paid.

III.

This by-law shall take effect on the first day of July, 1904.

A copy of this measure was served upon every manufacturer and user of steam power within the limits of the city prior to the close of 1903, and as provided, the law became operative on July 1, 1904. In the latter part of the last-named year the Property Department was charged with its administration and enforcement. Of the means used to secure recognition of its terms I shall deal at later date.

What Is Smoke?

In 1846 Sir Thomas de la Beche and Dr. Lyon Playfair, acting as Royal Commissioners, in reporting to the British Government, submitted the following definition:—

"Smoke consists of vapors produced by the partial combustion or distillation of coal, carrying up small particles of the fuel in mechanical suspension, and depositing by the combustion of one of their constituents, carbonaceous matter in a fine state of division."

The outstanding word in the foregoing definition is "partial," inasmuch as it indicates that smoke is a product of incomplete combustion, and implies an existent residuum which has not performed effective work, and must perforce be regarded as a measure of waste.

Smoke—Waste: Synonyms.

The words smoke and waste as applied to combustion of fuel under boilers may be regarded as synonymous, and, while a clear stack does not always attest good combustion, I shall in the next article endeavor to adduce reasonable proof of the proposition contained in this paragraph.

—An exceptionally handsome catalogue has been issued by the Borland Carriage Co., Limited, of Stratford. The cover is finely designed, with an embossed shield in a copper effect. Inside are complete cuts, with descriptions of the carriages manufactured by the Borland Company.

—Section 7 of the Canadian General Electric Co.'s supply catalogue has just been received, and contains a full account of wires and cables. The catalogue is fully illustrated and well arranged, and should prove of great value to those who are interested in these supplies.

THE ORGANIZATION OF BUSINESS.

The outstanding feature of present day business is its complexity. Side by side with that, however, has gone an analysis of its organization, a study of the elements which enter into it and the relationship of the part to the whole. The subject is interesting. Samuel E. Sparling has just written a book, (Business Organization; Toronto, The Macmillan Company; $1.25), which covers the field in a comprehensive manner. For instance, he discusses farming, compares the economy of small and large farms, the various systems in force, etc.

In manufacturing, the organization of the factory is treated of in detail. Elements which affect localities and make them particularly suitable for the location of plants are cited. The factory system has constituted a revolution in industrial conditions. The economical arrangement of its departments and the proper carrying out of the duties of every officer tell largely in the success of the institution. A brief discussion is given of the work of the superintendent and his subordinates, and the means generally adopted for ensuring the efficiency of the working force.

Accurate cost accounting is beginning to be generally appreciated. "Many instances," the writer says, "might be cited where failures have resulted because little attention had been given to the cost of production and distribution. Improper charges for depreciation, interest, materials, labor, and various other items afforded opportunity for serious mistakes in ascertaining accurately the final costs. In prosperous times, when the demand for the factory output is large and prices high, the necessity for a system of cost-finding is not so apparent, but when the management is forced through competition to a low margin of profit, and in some cases to actual temporary losses, it is necessary to know the costs and to develop some plan for their distribution."

Having thus established the need for system the author enters into a general discussion of what constitutes the various parts of the cost, how they should be allotted in the case of fixed charges, etc., and what is the best system upon which to work. Although every man must develop a scheme more or less peculiarly adapted to his own conditions, yet there are certain general principles upon which all systems of cost accounting must be based. These are developed in the book before us. It will prove a stimulus to working out in detail what it outlines in the general.

The book contains in addition, chapters on markets and selling, credits and collections, advertising, and other subjects pertaining to the organization of business. An excellent index and table of contents make the information readily accessible.

Sudden Advance in the Price of Platinum.

Platinum, ounce for ounce, is now worth more than half as much again as gold, while the demand for platinum, like the demand for other metals, has increased. There has been talk of an export duty on the metal produced in Russia, and a rumor that such a duty was about to be imposed was given credit for causing the recent sharp advance in the price of the metal; but the export tax plan, it is reported, has been definitely abandoned, and the Russian Government will make special inducements to encourage prospecting. French investors are heavily interested in the industry. The largest producer and also an extensive buyer of crude platinum in the Urals is a French Company operating a large refinery in Paris.

It should be noted that the imports of platinum into the United States, which is a large consumer, during 1905 were valued at $2,173,263, as against $1,879,155 in 1904, an increase in value of $294,108. Considering the increased demand for platinum, the gain in importation is slight, but if the high price and scarcity of the metal be taken into account the wonder is that there was not a large decrease in the quantity imported.—Industrial World.

Varnish for Iron.

The following is the method given by M. Weiszkopf of producing upon iron a durable black shining varnish: Take oil of turpentine, add to it, drop by drop, and while stirring, strong sulphuric acid, until a syrupy precipitate is quite formed, and no more of it is produced on further addition of a drop of acid. The liquid is now repeatedly washed with water, every time refreshed after a good stirring, until the water does not exhibit any more acid reaction on being tested with blue litmus paper. The precipitate is next brought upon a cloth filter, and, after all the water is run off, the syrupy mass is fit for use. This mass is then painted over the iron with a brush; if it happens to be too stiff, it is previously diluted with some oil of turpentine. Immediately after the iron has been so painted, the paint is burnt in by a gentle heat, and, after cooling, the black surface is rubbed over with a piece of woolen stuff, dipped in and moistened with linseed oil. According to the author, this varnish is not simple covering of the surface, but it is chemically combined with the metal, and does not, therefore, wear off or peel off from iron.—The Practical Carpenter.



CHAS. F. ROLAND
Industrial Commissioner, Winnipeg.

The Helena Costume Co., who appeared in the list of new members in the January issue of INDUSTRIAL CANADA as manufacturing in Toronto, are located in London, where they manufacture cloaks, suits and costumes.

IS "TRANSPORTATION" A COMMODITY?

Railway officials sometimes claim that as "sellers of transportation" they should be paid prices based upon what the traffic transported will bear, or what is warranted by market conditions, likening the selling of transportation to the selling of any other marketable commodity. That there is no real analogy between the two should be obvious. The price of a commodity is regulated by the important factors of supply and demand. A manufacturer or merchant when he takes goods to market, does so in competition with the world. He receives what the market conditions warrant and no more. It may be that he will effect a profitable sale on one day while on the next he may market his goods at a loss. Railway rates, on the other hand, are not open to the competition of the world. Indeed the competitive element is practically eliminated and all rates are now the subject of agreement between carriers. They are not subject to fluctuation by the law of supply and demand. The governing principle of freight classification and rates is to classify traffic and fix charges thereon so that the burdens of transportation are reasonably and justly distributed among the articles carried. This arises under the obligation imposed upon carriers by the law not to charge unreasonable or unjust rates or to impose any unjust discrimination or undue prejudice in any respect whatsoever.

Some years ago when times were prosperous and a general advance was made in railway rates, it was asserted in explanation that the advanced rates were necessitated by the increased cost of operation, and that the railways should be allowed to share in the general prosperity; this in spite of the fact that the introduction of greater economies in railroad operation had effected reductions in the cost of transportation and the enormous increase in freight traffic had probably given the railways a full share of prosperity. If it were reasonable to advance rates in prosperous times, it might be expected that rates would decline in hard times when the country was less able to pay them, but as railway rates are not a commodity nor subject to the general law of prices applicable to other commodities, they do not materially decline in a period of depression. In fact, hard times and light traffic conditions have also been cited as factors necessitating advances in freight rates. If the price of transportation by railway were a commodity, we would expect to see freight rates by land fluctuate in the same manner as do rates for transportation upon the ocean. It is well-known that steamship rates fluctuate from day to day, depending upon the amount of traffic offered the ships for carriage on the one hand and the number of ships available to transport this tonnage on the other. Ocean rates are ruled by the law of supply and demand. Railway rates have been properly termed a tax imposed for the benefit of the carrier rendering the service. It is necessary, therefore, in the interests of the public that they should at all times be just and reasonable.

LIABILITY OF EXPRESS COMPANIES.

Another case of loss through the acceptance of a special contract, limiting the liability of carrying company, has come to our notice.

A shipment of samples too heavy to be forwarded as baggage was shipped by express to a point west of the lakes. The value of the shipment was something over $500, and it appears to have been destroyed in a railway wreck while in transit. The owners made claim upon the railway company for the value of the property, but were informed that the total amount recoverable under the shipping receipt was $50. It appears that the receipt contains a condition which reads as follows:—

It is further agreed that this Company is not to be held liable or responsible for any loss of or damage to said property, or any part thereof, from any cause whatever, unless in every case the said loss or damage be proved to have occurred from the fraud or gross negligence of said Company or their servants; nor in any event shall this Company be held liable or responsible, nor shall any demand be made upon them beyond the sum of fifty dollars, at which sum said property is hereby valued, unless the just and true value thereof is stated herein.

The value was not stipulated on the face of the receipt; consequently, $50 was the amount agreed upon as recoverable in the event of loss for which the carriers were liable.

The Supreme Court of Canada has ruled that while special contracts limiting carriers' liability for loss or injury resulting from negligence are prohibited by the statute, there is nothing to prevent shippers and carriers from agreeing beforehand upon the amount of damages recoverable in the event of loss occurring for which the carriers are liable. The way to provide against loss of this kind is, of course, to see that the correct value of the property is stipulated upon the receipt when the conditions require it. Had this been done when the shipment under discussion was forwarded, the owners would have been able to recover the full value of the property. It is possible, of course, that they may have had to pay a small increase in the charge for carrying, but this would have been infinitely better than accepting $50 when the goods are lost when the true value was over ten times that amount.

Steam-Raising With Coke-Gas.

Several of the Lancashire type boilers at the Heinitz Colliery, Saarbrucken, have recently arranged for firing with coke-oven gas coal instead of coal. The burners used consist essentially of cast-iron caps screwed on to the ends of the boiler flues, each cap carrying a gas nozzle, and being perforated with orifices for the admission of air. The front end of each flue is lined for some distance with firebrick, to protect the metal from the direct impact of flame, a firebrick grating being set up at the further end of the lining, in order to secure better distribution of the hot gases of combustion. Safety flap valves, to minimize the danger from explosions, are mounted on the further end of the boiler flues, which are extended as far as the brickwork setting of the boiler. The top flues previously in use have been bricked off, to guard against the overheating of the boiler plates in the vicinity of the steam chamber. The coke-oven gas is supplied from the cokery, through a 6-inch pipe about 270 yards in length; and a small jet of illuminating gas is kept alight near each gas nozzle, in order to re-ignite the coke-oven gas after any interruption in the supply. The conversion is reported to have been attended with satisfactory results.

Germany leads the nations in the manufacture and use of alcohol for light and power. In that country potatoes are the chief source from which alcohol is produced. The potato crop last year reached the astounding proportions of 1,775,579,000 bushels, or more than 53,000,000 standard tons. Of this amount nearly one-half was used in the manufacture of alcohol and starch.

THE MODEL FACTORY

By H. L. C. HALL, Fellow of the International Accountants' Society.

A series of three articles on "Factory Organization and Factory Management," of which this is the first. The remaining two will appear in future issues of "Industrial Canada."

FACTORY IDEALS.

The first thought of the man who reads these articles will be that the conditions described are ideal—that they are impossible of realization in the actual practice of the manufactory of to-day. Possibly it may be as well to admit at once that this is true. Do we ever realize our ideals in full? Possibly not; but yet we must have ideals, and the measure in which we do realize them is the measure of our success. We must have a point to aim at, and it may be put down as an absolute fact that a low aim never made a high mark in this world. Therefore, I say that our ideals should be as high as possible. Aim at perfection in all things, and let our success be measured by results.

It is, I think, a mistake to assume that the sole end and aim of every man engaged in commerce or manufacture is the amassing of money. The making of money is a part of the game—and a very necessary part. If money were to be lost instead of made the game would stop. Our commerce and trade would come to a quick and natural end, for it would lack the sinews of war. But there are many men engaged in manufacture to-day to whom the money they can make is a secondary consideration. They are there for the love of the game itself. Money made is the measure of their success at playing the game, and so they wish to make money; but there are more than one would think who are in trade and manufacture because they realize the good they can do, and are doing, through the maintaining of their extensive plants, and through the employment they give to those dependent upon them.

To such as these we owe our ideals. These are they to whom it is a real pleasure to produce. These are the men who aim at perfection—and who come near enough to their aim to make it worth while. These are the men who are willing to spend a dollar here and there so long as the expenditure will bring them a little nearer to their ideals. Let us have men with ideals. To have ideals means to have imagination, and all that has ever been done which is worth while has been the work of men with imaginations and with courage enough to make their dreams come true. But this is to be a practical exposition, and we will come at once to a consideration of the practical.

Economy is a big factor in success, especially when we measure success by a financial standard, and it must be recognized at the outset that waste will benefit nobody. The money-mad spendthrift who lights his cigar with a ten dollar bill wastes ten dollars and benefits nobody in the world. The world is that much poorer—and would not be one whit the poorer if he were out of it. In the same way, the manufacturer who lets a part of his profit go the way of the junk dealer or to the scrap heap is working wrong to others and good to none. The waste of a dime's worth of raw material or a dime's worth of time is a pure waste, and nothing else. The time and the money are gone. They do good to no one. The workman who is permitted to hurry his task and use the time saved to some good purpose of his own may be, and very probably is, benefited, but the workman who is permitted to idle away an hour is not the gainer by an iota; in fact, he is pretty likely to be the worse off.

The man who permits his workmen to waste their time in fruitless fritterings is in the same class as the money-mad chap spoken of above. He is only a milder specimen of the same class. He buys an improved tool or a time-saving device because of what it will save him. But because it is expensive he buys one, and wastes the cost of a second and third of the same sort every month or so because of his shortsightedness in having bought but one. What would be thought of a contractor who hired two diggers with but one shovel between them? The question sounds ridiculous, but a parallel case can be found any day. For instance, I have in my mind's eye a big concern which bought and installed an adding machine. It cost much money, but it was a money-saver, for it saved lots of time. In fact, it did the work of two clerks, and was a signal success. But almost any time during the day you could see, if you chose to look, one or two clerks waiting a chance to use the machine.

Of course, the machine was expensive. And, of course, the waiting clerk could get through his work just as quickly by waiting and using the machine as by going ahead in the old way; but that is not the point. The real point is that the concern wasted the cost of another machine in a month or two, and that fact never appealed to the management until an outsider called attention to it. Strangely enough, it often takes a rank outsider to call attention to things of this sort. If the time can be saved, save it, even if it results for the time being in some one doing a little less work and getting through a little more easily.

In putting into practice a new plan—a plan which makes work easier—a plan which enables two men to do the work of three or four—there is always a tendency to the thought that there is involved in the reduction of the force an element of injustice to the displaced man or men. This is a false view, and one which the spirit of progress cannot countenance for a moment. No man who is worth a cent to the country wants to stay for a minute in a place where he is useless—he has no business in a place where he is superfluous, even if he were willing to stay there. This is the course of nature. It is another case of "the survival of the fittest." Where three men are cut down to two, the poorest and least capable of the three will be the one to be dropped. Number three is superfluous; he must find a place where he is needed. He cannot expect to stay where he is and be a drag on the wheels of progress. Improvement for the other two must not stop because he is relatively incompetent. Labor-saving devices decrease the amount of necessary labor in a given line or a given place, and their use is increasing, and will continue to increase.

The Factory Office.

We will assume that the factory we are considering is one of considerable size, employing about five hundred men. We take our illustration thus merely for the sake of convenience, and it will be seen on reflection that the plans and methods outlined will differ from those applicable to a factory of a tenth the size—differ only in degree and not in kind—that little or no modification is necessary for their adoption to a factory of the smallest size. It is a mistake to take it for granted that an elaborate and complete plan of organi-

zation and management is necessarily a complicated plan, or that it is possible of adoption only where there is to be found an army of employees. The plan of operation followed in a small factory should differ from the plan followed in a large concern only in minor details, and not at all in completeness.

There is still another point to remember, and that is that completeness must not be allowed to degenerate into red tape and fussiness. Cut out the useless at every point, and let real usefulness be the touchstone to be applied in each and every instance. Ask the question, "Will it pay?" in every instance. Count the cost and measure by results, and decide upon the merits of the case. Make no records and use no forms merely because they look well. And, on the other hand, omit no records or forms merely to save a dollar or two on the printing bill, only to spend or waste five times as much through the lack of proper assistance which a good form or blank can render. Blank forms cost but a mere trifle.

The Office Force.

In the ideal factory organization there are three divisions of the office force: the executive force, the recording force, and the selling force. One individual may very possibly have duties in all three divisions, but in any case the separation of work should be clear and distinct, and especially so as regards a separation of the expense. The cost of each division should be definitely known and separately considered. It is a very convenient matter to have a "general expense" account, to which anything and everything can be charged, but such a custom is the death knell of any steps toward economical administration. Burdens of expense there are and always will be, but let each department bear its own burden, and let the praise or blame rest where it belongs.

To produce the best results in our operations the chief executive should be easy of access to any who may have legitimate business with him. Care must be taken that his time be not wasted or used to no useful purpose, but, on the other hand, equal care must be taken that no pertinent matter be prevented from reaching him at first hand. It is, of course, necessary that all routine matters be presented to him through the regular channels, but there are times when the regular channels are not the proper ones, and some plan should be provided whereby the least among the employees of the plant may reach the ear of the chief without the intervention of a third party. To this end it may be arranged that a certain period of each day be given over to the reception of employees who have pertinent matters to call to his attention. Let it be made known to all that this privilege is in force by means of notices prominently posted about the plant or by notices printed on the pay envelope or on the time cards. A proper form of notice to this effect may be as follows:—

JONES MANUFACTURING COMPANY.

NOTICE.

Any employee is at liberty to interview Mr. Jones on any matter pertaining to the betterment of the business or the employees of this company provided that the matter is one which cannot be properly taken up with his foreman or superintendent. If such an appointment for an interview is desired application will be made on a blank which will be furnished to the applicant upon request at the timekeeper's office. All employees are urged to make free use of this privilege.

THE JONES MANUFACTURING CO.

Application for Interview.

Name .....

Department .....

Desires a brief interview with Mr. Jones for the purpose of making a statement or request relative to:

.....

.....

.....

The applicant will be notified as to the time when the call may be made for this purpose.

There are times when it becomes extremely desirable that the employee in any station may have the right to go direct to the head of the concern with a matter of importance, and there are times when the privilege of doing so may result in much good, and possibly in a large saving to the concern, and possibly in some revolutionary improvement. Many a workman has ideas. If he is loyal to the concern he will place these ideas at the disposal of his chief if an opportunity is given. If there is no opportunity given —if he must contrive and scheme to get an audience—the idea will go elsewhere, or, worse still, be wasted entirely. The workman is close to his work. He sees all the details of his particular part of it with microscopic distinctness. To listen to him is to get the advantage of an entirely new and novel point of view, and this is well worth while, and cannot help but be productive of good results.

Let us admit, for the sake of argument, that nine out of ten of these interviews will be a waste of time so far as definite results are concerned. The tenth will still make the whole ten worth while. And there is another point. The plan will make the workman feel that he has a place in the organization which is not limited to his name on the payroll and his number on the check-rack. We are all human. We all like to feel that we are something and somebody in the scheme of things. A three-minue talk will send your man back to his bench or his machine with a new impression, and a good one, both of you and of his own standing in the plan. The good effect of this feeling on his part will not be lost in a minute or in a day, and if the man in question does not do more and better work as a result of the interview it will be because he is no good, or because he was already doing his very best. All this is worth three times the time and trouble it will cost.

You cannot count in dollars and cents the benefits of this plan, but there is one place where it can be noticed and tested, and that is in the saving of possible waste. How much can a careless or indifferent employee waste for you if there is no particular reason why he should be careful? And how much could the same man save for you if he made it his business to use your time and your tools and your materials as though they were his own, with a view to saving as much of each as he could. Figure it out for yourself, and you will see that a personal interest of this sort manifested by just one man will amount to quite a respectable matter.

The blank spoken of above is to be obtained from the timekeeper and filled out by the applicant, and then deposited in a closed receptacle located near the spot where he turns in his time or gets his check. This receptacle is to be locked, so that it is accessible only to the head to whom the application is made. This is imperative, for the

good effect of the plan depends upon making the interview a personal matter between the employee and the head, and there must be no interference on the part of foremen or superintendents. In fact, it will be better if the matter is not officially known outside of the parties involved. The importance of this will be seen at once when it is remembered that the matter in hand may possibly be a complaint against the foreman, and if this is the case it must be settled without bringing the foreman involved into the matter—at least directly.

At the proper time word will be sent for the applicant to present himself at a convenient place for the interview. The proper place will not be the private office, for there is a feeling that a man who is called into the private office is "called on the carpet."

The superintendent's office or the shop office, vacated for the purpose is a far better place for the interview, or for the interviews, for there will infallibly be a number of them, and the more the better, so long as they are productive. Here the chief has a chance to demonstrate his diplomacy and his fitness for his place, for there is the utmost room for the display of tact. The man who has nothing of importance to communicate must be shown that his subject is out of place—that it should have been taken up with his foreman. It is possible to show him this without hurting his feelings, and if this is done he will never offend again. If one useless talk is held with every man in the shop it will still be worth while, for it will establish an "entente cordiale," which is impossible under any other circumstances.

The idea is to establish a connection above and beyond the idea of wages, and when this is done there will be a feeling which will come back in actual dollars and cents. Of course, there is something beyond the dollar and cents consideration in mind in inaugurating the plan, but even from that sordid standpoint it is productive. The better the men in your plant, the better the results. You can by this means get a personal line on the hands you employ, make the good men better, and get a "first hand" view of things which will be a revelation to you.

The Accountant.

The accountant or the bookkeeper is at the head of the recording department, and there is no man in the force who is so little appreciated as he. To many he is viewed as a useless expense—something necessary, but irksome. This is all wrong. If your accountant is an unproductive expense it is time for you to get a new accountant, for this department should be one of the most productive in the plant. Here is where your economies should be pointed out. Here is where present waste and loss are detected and reported. Here should be the place where any and all details of your operation should be instantly available. And they will be if the department is properly organized. All this is true, mind you, whether the department consists of one man or a score. If it is one man, see to it that he is a good man—a competent man. It will cost a little more to get such a man than to get a "dub," but the difference will be well invested.

This man, if he is the right man, will build your systems and make your plans. He will start and supervise your cost system. He will change it when it needs changing, and will save his cost every month three times over in the time he will save you, if your time is worth anything, and if he is the right man. There is no place in the establishment where petty economy is so foolish as in the services you buy for this department. Of this, more anon.

Of course, the first desideratum here is trustworthiness. This man must know practically all you know in regard to the inside facts of the business; and the more he knows the less he will say—if he is the right man.

The Men in the Factory.

Individual production is the measure of the total production in your factory. If you have a force which is high in efficiency, the rate of labor cost will be low—provided the physical conditions of production are correct. To the end that the force may be high in efficiency it will be necessary to eliminate all low-grade men, and to keep the efficiency of the rest at the highest point—not to drive the men, but to keep them up to the mark.

This means a series of records which will show from day to day the performance of each man and of each group of men. What was done yesterday by man and machine should be the standard for to-day. And for to-morrow the aim is to do better than to-day.

It is not so much a question of the wage you pay as of the result you get for each dollar paid in wages. The rate of wages is often fixed without reference to you. Competition and demand help in making the rate; or, possibly, the unions take a hand. In either case you have little to say about it. But the rate of production is largely within your own control. It will be greater or less in proportion to the means you take to guide and regulate it. It cannot be increased permanently by standing over the men and driving them on to greater efforts, but by competition it can be materially improved. This involves the premium principle, and this will shortly come in for a brief explanation.

The attempt has been here to outline a general plan for an efficient organization, without which no great success can be possible except by accident—and such accidents are rare.

The Sales Department.

This is the department which furnishes power for all the rest. On its success depends the prosperity of the whole establishment. In no other place is money so willingly spent. And sometimes there is no place where money is so foolishly spent. Here is where the services of the recording department can be made extremely valuable. The total of sales is what you usually look at, and in doing so you judge of the value of the department and of the individual salesman—and here you sometimes lose sight of the most important factor: the amount of money made on each sale or by each salesman. The man who makes the most sales may not be the most profitable man in the force—very often he is not.

The recording department should give you the amount of sales in gross, the amount of sales by individuals, and the cost of making the sales in each case. If your records do not show the latter item now, you have some surprises coming to you when you arrange to have these figures presented. Territories which you now consider your mainstay may possibly be found to be causing you an actual net loss when every item of cost is reckoned. Men whom you have looked upon as your best salesmen may be found to be far behind those who sell far less amounts when the net result is found. All these are things which must be known. If the results shown are confirmations of what you now think to be the facts, so much the better. But facts you must have, no matter what they show.

It need not cost an additional penny to have the exact figures presented on these points if the proper means are taken, and these means we shall attempt to show a little later on.

In the next papers will be taken up a definite plan for the handling of each of the departments specified, and an attempt will be made to show how the desired results may be had without adding to the cost of the work now being done in any department.

It will be shown that no addition need be made to the expense account unless minute details are wanted. Of course, there will be a slight expenditure necessary for the purchase of forms and cards, but this will be insignificant. It will also be found that the gathering of data in very minute detail will add to the cost. In this connection it must be determined beforehand by each individual just how minute details are wanted, and whether the cost is justified by the result obtained.

SOME DEFECTS IN STEAM BOILERS.

A writer in the "Industrial World" discusses the causes and methods of prevention of grooving and pitting in steam boilers. The subject is one that has commanded the attention of every owner of a steam boiler, and the following experience will be of interest. It is not difficult to understand how a machine that runs rapidly is soon worn out unless well taken care of. But when any part of a plant is absolutely stationary, as for illustration, a steam boiler, it is often difficult for the owner, or the public at large, to understand how it can wear out and become much weaker than it was when new. It is the object of this article to make this point clear to the non-technical reader, especially to those who own steam boilers.

We will first assume ideal conditions consisting of a perfectly clean boiler fed with distilled water containing no impurities.

When a cotton loom or any other machine is in active operation we readily understand that friction causes the parts to wear, and if we study the operation of a steam boiler it will soon be plain that while the boiler itself is motionless, the water in it travels very fast, and the speed of it is greatest in the most efficient type.

Grooving by Action of Water.

There is an old saying to the effect that "Gentle waves wear the solid rock," which may be adapted to the case we are considering without a very great strength of imagination, for when heat enters a portion of the water in a steam boiler, it becomes lighter than before, therefore it quickly rises to the highest point possible. This tends to leave a vacant space in the boiler, but, inasmuch as "Nature abhors a vacuum," other water rushes into this space and as this process is repeated indefinitely, or as long as heat is applied to the water, the action slowly wears the plate of which the boiler shell is constructed, and this is called grooving.

From the above description it will be plain that if the shell is protected from this action it will not become worn thin and possibly be made dangerous, but if the water used is absolutely pure there is no chance for protection from this source.

So much is said and written about impurities in water used to feed steam boilers, that it hardly seems possible for pure water to be objectionable in any case, yet it sometimes does harm.

Defects of Distilled Water.

In the writer's plant a very large proportion of water used has been distilled in the process of heating buildings with steam. It is condensed and returned to the boiler in a pure state, thus leaving the shell and the tubes clean. The latter showed worse effects from the use of this water than the former. Small blisters appeared on them, and when they were removed, bad spots appeared in the iron. These were not there when new, but came slowly and enlarged as time passed.

Nothing was done to counteract this evil, but to put three quarts of soda ash in each boiler about once a month. This caused the entire surface to become coated with a thin scale that prevented the objectionable action above mentioned.

Water used for boiler feeding usually contains more impurities than are wanted, hence strong efforts are made to dispose of them before they damage the shell and tubes.

One plan for doing this is to remove foreign matter before feeding water into the boiler, and this process is called "water softening," because water that will not readily mix with soap and form lather is always called "hard," hence pure water is termed "soft." Water softening plants are in successful operation in many parts of the country, under different conditions, but the first cost of them is rather heavy. However, they prove to be profitable, especially for large plants.

Artificial Preservatives.

Another plan for preserving steam boilers, where the water is naturally bad, is to introduce suitable compounds to neutralize the bad effects of the foreign matter in it. While this is a constant expense it is not excessive and a special plant is not necessary.

While the foreign matter found in different parts of the country differs widely, a certain compound will sometimes answer for several places, but the only safe way is to have the feed water analyzed by a competent and reliable chemist, who will prescribe a remedy that will be good for that case.

While we are not prone to think that nearly everybody is dishonest we are willing to say that none but parties known to be honest should be entrusted with this important work.

Treatment of boiler feed water is sometimes based on analysis of the scale which forms on the inside of a boiler. This seems rational because this scale contains much that informs a chemist of the true condition of the feed water. It is not a difficult matter to procure a few cheap drugs and concoct a compound that will do good work in removing old scale from a certain boiler, but when such a compound is advertised as a universal panacea for the ills and abuse from which boilers under all conditions are suffering, we are incredulous.

If a boiler is badly scaled it is dangerous to put a large quantity of compound into it, and to use it for a month, without internal inspection. A large body of scale may be thrown down. If this forms into a solid mass, it will prevent water from coming in contact with the iron or steel composing the shell, and will cause it to be burned.

Must be Used With Care.

Strange as it may seem, a compound is not always given credit for doing good work along this line, even when it is clear to all concerned that it has accomplished exactly what it was intended to. There are boilers in use that would be full of holes if their internal surfaces were not coated with scale. Consequently when a compound is introduced that removes this scale the boiler leaks. This appears only natural. But when an engineer or a steam user says that he will use no more of that compound because it made his boiler leak, it plainly becomes one of those half truths which are more dangerous than a simon-pure mis-statement.

Soda Ash in Right Quantities.

Soda ash has already been mentioned as a remedy for certain troubles, but like many other good things, it is quite possible to use too much of it, thus creating a worse condition of affairs than existed before a remedy was attempted. After such a warning the reader naturally wants to know how much to use, and if it was possible to state arbitrarily just how much to put in a boiler it would give me pleasure to do it, but unfortunately this cannot be done. The amount necessary will depend on the size of boiler pressure carried, amount of water evaporated, and the impurities found in the water.

If three or four quarts are put into a boiler that can easily develop 100-horsepower it will not be too much, and if another quart is added each day for a week, it will probably do no harm. When a white substance begins to show around valve stems, flange joints and water gauge connections it indicates that the water is saturated with the soda ash, and its use should be discontinued for a time. A few experiments will enable the engineer to determine the proper amount to use in his particular case.

Manufacturers of boiler compounds sometimes object to the mention of soda ash, as it injures their business. But we are quite sure that a very large proportion of ordinary compounds consists of soda ash, with a few other ingredients, some of which are intended to disguise the soda ash, and lend dignity to the whole concern.

The excessive use of soda ash has a bad effect on the packing used in flange joints, causing it to lose its strength. It is blown out by the steam pressure, making much disagreeable work in replacing it.

Foaming to be Guarded Against.

Too much soda ash will cause foaming or violent agitation of the water, and some of it is thrown into the steam space whence it passes to the engine. It there prevents the cylinder oil from lubricating the sliding surfaces as it otherwise would. In an effort to remedy this evil, the engineer feeds in more cylinder oil, which does not wholly eliminate the cause of trouble, but on the other hand complicates matters still more frequently.

In a steam heating system where the condensed steam is returned to the boilers, it is necessary that all of the cylinder oil be removed, unless it is almost pure mineral oil. If there is over 2 per cent. of ordinary tallow, which always contains more or less acid, it is dangerous. If this is fed into a steam boiler it forms into a sticky, tenacious mass that floats on the surface at first, but after it has collected particles of foreign matter that are floating around, it becomes heavier than the hot water; hence sinks to the lowest points, where it cleaves to the metal surfaces and effectually prevents water from reaching them.

An immense quantity of heat is constantly passing through the plates in a boiler, and is carried off by the water, but when an obstruction of this kind prevents the rapid removal of this heat, it must of course accumulate in the plate. Iron increases in strength as its temperature rises until it reaches about 550 degrees Fahrenheit, after which it begins to weaken, and when a dull red is attained, its strength is greatly impaired. It cannot maintain its form, but bulges out and forms a bag. The intense heat then drives the objectionable matter away, so that when the manhole cover is removed there is little or no trace of oil left.

WOOD FLOUR.

Enquiries have recently been directed to the offices of the Canadian Manufacturers' Association regarding the manufacture in Canada of wood flour, and the ability of Canadian manufacturers to supply a demand for this material in British markets.

"Wood flour," "wood meal," "wood pulp," or "powdered wood," as it is variously named, is made of finely ground wood treated by special machinery, and is used both in the production of high explosives and of linoleum. It is not very fine sawdust, as some Canadian manufacturers have supposed in the past. It must be prepared on special grinders fitted to emery wheels, instead of the ordinary sandstone, and must be ground dry, instead of wet, as with the ordinary wood pulp.

A good market for this material exists in Great Britain. A Scottish consumer, desirous of buying in Canada, states that a conservative estimate of the annual consumption is 8,000 tons, composed principally of the finer grades of the material. He gives a list of the current quotations in Britain:—

35 mesh	is worth	45s.	to 50s. per ton.
45 "	"	60s.	per ton.
60 "	"	65s.	"

All c.i.f. United Kingdom ports.

As far as we have been able to learn this material is not manufactured in Canada at present. The above figures indicate, however, that a good market exists for wood flour, and the attention of Canadian manufacturers and investors is directed to the matter. The larger pulp and lumber mills of Canada should be interested, as it could be manufactured economically in conjunction with these industries. More definite information and the address of a British consumer willing to act as British representative for a company producing wood flour may be had at the offices of the Association.

The annual statement of the Lumber Insurance Company, of New York, which is the only company confined entirely to this class of risks which is authorized to do business in Canada, shows a satisfactory year's business. Although just operating since 1904, the company has a surplus of $105,163, besides a reserve for reinsurance of $130,797.

"Paroid Proofs" is the title of a booklet issued by F. W. Bird & Son, whose Canadian factory is at Hamilton. The booklet contains a series of cuts showing buildings which have pariod roofing. A great variety of buildings are shown, proving the extent to which this product is used in the United States. The book is artistically worked out and is worth a perusal.

The Moffat Stove Co., Limited, Weston, have issued a calendar of exceptional attractiveness. There will be no danger of its being discarded before the year is out.

The Brantford Carriage Co.'s calendar this year contains a fine representation of Brant with his band of warriors crossing the river. It is very effective.

The Canada Carriage Co. have a striking calendar in a burnt-wood effect. It is well designed and executed.

AMONG THE INDUSTRIES

The Hamilton and Fort William Navigation Company have placed an order with the Canadian Shipbuilding Company for an 8,500-ton steamer, to be constructed for the iron, coal and wheat trade. This vessel will be one of the largest on the lakes. Building operations will take place at the Niagara shipyards, and the engines and boilers will be made in Toronto.

The Board of Trade, Galt, are negotiating with a number of capitalists who wish to establish a brass manufacturing establishment in that town. A by-law will be submitted to the people providing for the conditions upon which the company are willing to build their factory.

The Madison Williams foundry, which is the latest acquisition to Lindsay's industries, is now ready for business. A complete equipment of machinery and pattern and moulding apparatus is in place. Besides a general foundry business the company will specialize on water-wheels. Pulleys, belting and tie-cutting machines will also be manufactured.

The B. F. Graham Lumber Company have purchased the Taylor-Pattison Mill Company's holdings near Point Ellice, B.C. They intend building a large mill for export business at Esquimalt harbor, and will also increase their present plants.

The plant of the W. I. Kemp Co., Limited, Stratford, is being put in shape rapidly. The machinery is being set up and the raw material for manufacturing is being stocked.

The Canadian Pacific Sulphite Pulp Co., Limited, are proceeding with their plan for the erection of a mill at Swanson Bay, B.C. They have 83,000 acres of timber lands and a water-power capable of generating as high as 30,000 horse-power.

Huchison Bros., of Victoria, B.C., are entering upon the manufacture of gasoline launches on an extensive scale. They are fitting up a factory at a cost of $16,000, and will be in shape in a few weeks to proceed with manufacturing.

After being closed down all summer, undergoing repairs and enlargement, the Renfrew Milling Co.'s flour mill is again in operation. During the summer the dam has been rebuilt to give a higher head of water, more power being needed for the improved mill. New machinery has been placed in position, and the mill now has a capacity of 400 barrels per twenty-four hours. The Renfrew roller mills have nearly completed an immense new storehouse to meet the demands of the growing business.

It is now reported that the United States Steel Corporation are purchasing the property on which options were taken some time ago, and that they will proceed with the erection of a plant in early spring. The story has been told so often before that the public are somewhat incredulous, nor do the Steel Corporation make any statements themselves. However, if the plant is proceeded with it will undoubtedly mean the employment of a very large number of men.

An iron smelter at Quatsino Sound, Vancouver Island, is under consideration. J. A. Moore, who owns extensive iron ore areas on the island, is looking into the question.

The blast furnace of the Nova Scotia Steel Co., which has been closed for two months for repiping, relining, and other general repairs, is now in operation again.

During the past year in Galt extensions have been made to factories to the extent of 315,000 square feet of floor space. This means an expenditure of approximately $400,000. With the additional equipment added this sum will run up to $900,000. The "Manchester of Canada" is earning its title.

The Canada Metal Co., of Toronto, have purchased extensive grounds on Fraser Avenue and Liberty Street in that city, and two fine factory buildings will be erected on them. The buildings, which will be 40 and 50 by 500 feet respectively, will combine all the latest improvements in fireproof construction.

An idea of the way railroad equipment is being increased in Canada may be had from the case of the Canada Foundry Co., Toronto. A year and a half ago they turned out the first locomotive which had been built in Toronto for fifty years. To-day they are arranging for the erection of a special shop to accommodate this branch of their business.

A reorganization is in progress of the Cape Breton Coal, Iron and Railway Company. Their plant has been practically closed for about a year. English capital has been interested, and it is now proposed to prosecute the work of development with greater vigor than ever.

The name of the Canadian Barcalo Manufacturing Co., Limited, makers of quality beds, has been changed to "Quality Beds Limited," with offices and factory, as heretofore, at Welland, Ont.

The Allan Line has two steamers under construction for their Canadian trade. Both of these are over 10,000 tons. Owing to the recent strike among shipbuilders they will not be ready for the beginning of next season, but will be in commission during the summer.

The Imperial Coal Company, of Beersville, N.B., are about to open a brick-making plant. Beside their coal areas lies a clay belt which is well suited for brick. This will be utilized, and a plant with a capacity of 20,000 per day will be started as soon as possible.

Owing to the remarkable electrical development in Canada the Canadian General Electric Company has found it necessary to erect still another large machine shop, which will mean that between three and four acres of floor space will be occupied by this department. At present this department of the vast electrical works occupies 75,000 square feet of floor area. Contracts have been let, and the work is vigorously proceeding.

The planing mill owned by the George Wilson Building and Contracting Company, St. Catharines, Ont., was destroyed by fire during the month. The loss will exceed $15,000.

It is announced from Hamilton that the Canada Screw Company will build an additional factory on Birge and Wellington Streets, almost as large as their present plant.

The Wallaceburg beet sugar plant has closed down, after a most successful season. The length of the run was 96 days, in spite of a week's delay on account of beet deliveries. During that time between 54,000 and 55,000 tons of beets were sliced and 11,000,000 pounds of sugar turned out. Aside from bad weather conditions the run has been very successful. A new pulp drier was installed when the season was about half over and has worked very successfully.

A company has been organized at New Glasgow, with a capital of $200,000, for the manufacture of steel castings. A site has been acquired near the steel works and suitable buildings, with one open hearth furnace, will be installed.

The Clothespin Company, of Arnprior, have organized for business. Their factory is approaching completion and a permanent directorate has been elected.

A charter has been granted by the Manitoba Government to the Manitoba Rolling Mills Company, Limited, with a capital of $100,000, to take over and operate the Kirkwood Iron & Steel Rolling Mills, of Winnipeg.

A $5,000,000 car company is being organized in Montreal. It is understood that Mr. Fred. Eaton, President of the American Car and Foundry Company, Berwick, Pa., is at the head of the new enterprise. A site has been selected and work will progress at once. The new works are to have a capacity of fifty to sixty completed cars a day. The immense demand for rolling stock on the Canadian roads at the present time would indicate that there is sufficient room for this new car company.

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the name of enquirers, apply by number to the Secretary, of Toronto.

178 **Agencies.**—Manufacturers of first-class goods of any kind desiring representation in **Glasgow, Scotland,** are invited to correspond with a firm of agents who are well placed to do business.

179 A Canadian who is about to open an office in the **City of Mexico** would like to hear from any manufacturers desiring to extend their business with that country.

180 **Apples.**—A **North England** fruit importer solicits consignments of Canadian apples, chiefly No. 1's for meeting a demand of 1,000 barrels per month. Fruit must be reliably packed. Terms, cash against bill of lading, commission, or will buy outright.

181 **Asbestos.**—Possibilities of an extensive market in this article are reported by a **New York** house who are in a position to place immediate orders.

182 **Boat Oars.**—A **Sunderland, England,** timber firm makes enquiry for Canadian manufacturers of boat oars (made of ash) in 14, 15 and 16 feet lengths.

183 **Boots and Shoes, Cottons.**—A manufacturer's agent in **Christchurch, New Zealand,** who claims to have extensive connections and to be in a position to place large orders, wishes to buy Canadian boots and shoes, also denims, for cash.

184 **Bran.**—Quotations are asked f.o.b. Hamburg, Germany, on 50 tons or more, the lower grade of bran, to be marketed in **Scandinavia.** Terms, cash against documents. References supplied.

185 **Cheese and Butter.**—Enquiry is made for the above by a party in **London, England,** who has heretofore been handling Dutch and German goods exclusively, and who now wishes to secure the sole agency for some first-class Canadian house. He will assume all financial risk for bad debts. English bank reference.

186 **Chemicals.**—Quotations are asked f.o.b. New York on unlimited quantities of caustic soda, ammonium sulphate and blue stone. A **Hungarian** house enquires, who state they wish to purchase on their own account, and will pay cash against documents. Bank references supplied.

187 **Doors.**—A **North of England** firm seeks the representation of a Canadian house manufacturing yellow pine doors.

188 **Fish.**—A **Hamburg, Germany,** firm with extensive inland and transatlantic connections, solicits the agency for a Canadian house exporting canned lobsters.

189 **Handles.**—A firm in **Liverpool, England,** desire to receive quotations from 2,000 to 4,000 dozen on ash shovel handles, c.i.f. Liverpool, in 4, 4½, 5, 5½ and 6 lengths, 1⅝-inch diameter, all for early delivery.

190 **Hay.**—A **Durham, England,** firm desires to get in touch with Canadian shippers of timothy and clover hay to arrange for shipments in the near future.

191 **Honey.**—Quotations and samples are invited from Canadian houses able to supply 2,000 pounds of pure honey, put up in cans of about 5 gallons each. Terms, cash on delivery. A **Norwegian** firm enquires.

192 **Lubricants.**—A **London, England,** house is open to represent a reliable Canadian shipper of lubricants, tallow, greases, etc., and invites correspondence.

193 **Oak Boards.**—A **North of England** firm asks for prices from Canadian shippers of oak boards in various lengths up to 12 feet by 1 inch thick, and in various widths from 4 inches upwards.

194 **Oatmeal, Etc.**—A **Glasgow, Scotland,** firm, who are large dealers in oatmeal and feeding stuffs, invite correspondence and quotations from Canadian shippers seeking export trade.

195 **Paper and Boards.**—A **London, England,** paper agent and merchant dealing in paper and boards is desirous of corresponding with Canadian manufacturers who are seeking English trade.

196 **Pastry Boards.**—A **New York** firm of exporters ask to be placed in touch with reliable manufacturers of pastry boards made from basswood.

197 **Peas, Blue Marrowfat.**—A firm of grain dealers in **Boston, England,** are open to buy from 2,000 to 5,000 sacks of the above, and ask for quotations delivered London. Will pay sight draft with B/L. English bank reference.

198 **Pit Props and Spruce.**—A **Scottish** timber firm makes enquiry for names of Canadian shippers of pit props and spruce, and invites correspondence.

199 **Potatoes.**—A **Scotch** firm desires to get into touch with reliable Canadian shippers of potatoes with a view to securing supplies of the leading varieties for trial for seed purposes.

200 **Tool Handles, Etc.**—Enquiry is made by a saw-milling firm in the **North of England** for Canadian exporters of all kinds of tool handles, cart shafts, fellows, ash planks for "D" spade handles, maple roller blocks, and oak planks cut to specification; also window frames, doors, and sashes for supplying a very large demand.

201 **Wood Alcohol.**—A firm of picture-moulding manufacturers in the **North of England** make enquiry for Canadian firms in a position to sell them wood alcohol which is used extensively on the American continent in this trade.

202 **Woodenware.**—A merchant and commission agent in **Scotland** calling on the hardware generally, wishes to obtain the agency of a Canadian house offering washboards or other woodenware, as well as other lines suitable for his business.

ADVERTISING CANADIAN INDUSTRIES

By J. ANGUS MacDONALD

Author "Successful Advertising—How to Accomplish It."

How to Write Good Advertisements.

WRITING good advertising means to present the taking points of your goods convincingly, attractively, briefly, and in a thoroughly business-like style.

You must be brief; people have no time to pore over long-winded sentences and paragraphs—in advertising anyway. They may stand for it in a philosophical essay, and possibly in a novel, but the modern advertisement (competing as it does with many, many other advertisements for public attention) must get to the point in double-quick order. It must be attractive, to win the reader's attention, and convincing in order to hold it, and possibly effect a sale.

Writing advertising may appear to an unsophisticated outsider as rather easy work, but the party who essays it has distinctly opposite views. Let us stop and think it over for a minute. To write a business-bringing advertisement, or a series of advertisements, on a subject requires—

(1) Command of terse, vigorous, snappy English.

(2) A knowledge of the goods written about, which means study.

(3) An understanding of the public spoken to (more study).

(4) Appreciation of the value of advertising space.

The full force of this latest proposition is well appreciated by the man who pays the bills. If you can pen a first-class trade-winning ad. in a fifty-line space while the other advertising writer requires one hundred lines, then you should get at least double the salary of the other fellow. You are worth anyway that much to your principal—to the man who pays the bills.

I have always figured that a man who could write good advertising could write almost anything, upon any subject. This may sound like sublime rot and nonsense to the novelist whose books sell by the hundred thousand; to the poet whose dallying with the muses makes him a magazine magnet of magnitude; to the editor, who pounds political parties; and even to the reporter, who dishes up his fire-and-murder story, and then shies a quick, cold glance on the unromantic, coldly practical, business-bringing ad., the income from which, by the way, helps to pay his salary by helping to sustain his paper.

The Essentials of Good Ads.

Some of the aids to good writing are the elements of news and novelty. The reporter has them in his every-day life and work, a feature alone that makes his writings readable. The novelist, versifer, and editor are constantly meeting new paths, ideas, situations, characters, scenes and colorings. But the advertising writer's case, in many instances, is altogether different. There is no romance in offering fifteen cent hosiery for nine cents. What inspiration is there in a sale of shoes at a dollar ninety-eight? Can you imagine yourself being worked up to a fine fever of enthusiasm over an offering of sirloin steak at twenty cents per pound? If the buyer of agateware excitedly announces to you that you should write a taking ad. on twenty-five cent retinned dishpans marked down to nineteen cents, where is the romance about a confounded plebian dishpan to inspire you with noble thoughts about a noble ad? The buyer may feel excused if he shows excitement—nay, inspiration—over the affair, for he has probably by some clever market manipulation succeeded in breaking the market on dishpan quotations several points, but to the advertising writer looking for inspiration in dishpans there is apparently but small hope. It is clearly up to the ad. writer to make these ordinarily dry-as-dust data readable and interesting. To do so he must possess himself of *as much information as possible about the goods advertised, cultivate his vocabulary, train his imagination, and always, always have a wide-open mind, receptive to any and all ideas, to assist in the advertising of this merchandise.*

A friend of mine has been writing hardware advertising for the past three years, and, notwithstanding the repellant grimness of his proposition, manages to turn out a pretty good, interesting and different ad. every day. He is blessed with a vivid imagination, quick perceptions, and a most liberal vocabulary.

I know another young man, who, for the same reasons, coupled with a wide knowledge of shoes, sizes, styles, shapes and leathers, writes a daily grist of good, eye-attracting ads. on footwear.

Assuming that the new advertising writer's mental qualities are promising, he should further add to their advertising worth by studying the distinctive, individual, dramatic features of his subject. This means close analysis and a fine use of the perceptive faculties. After using his perceptions he constructs his ad.; after constructing, he judges the work just finished. From start to finish his work demands the exercise of a round of faculties, from the creative and constructive to the critical and perhaps destructive.

Some Maxims.

Some years ago I wrote the following, which fits in well with this present talk:—

"First of all the advertising writer must have something to say.

"If he has nothing to say and uses up a lot of words in trying to say it, the result is labored to the readers as well as to the writer.

"Study the article to be advertised.

"Try to get at the point of view of the reader. Try to use the argument that would influence him. He is the one to buy the goods. What you are trying to do is to sell goods.

"Presently you will find your ideas are presenting themselves in some sort of order, and the more you think the clearer and clearer will your ideas become until they are so crystalized that they are ready for expression on paper.

"At this point begin your writing.

"Just now you need not be so very particular about your choice of words.

"Simply write—using the words that come most readily and naturally.

"After you have given your ideas to paper, resolve yourself into the stern critic; concrete evidence of your ideas is before your eyes.

"Eliminate—condense—clarify.

"Use short words instead of long.

"Use words well known instead of words that sound strange or strained.

"Use forcible words instead of weak.

"You will find that certain words add strength to your ideas while others weaken. Keep a keen lookout for strong words.

"Do not be too terse.

"Say what you have to say—no more, no less.

"It's better to say too much than to say too little, providing you are giving facts. For the reader can skip what he does not wish to read, but he cannot supply omissions.

"Hew to the line of truth.

"There are enough truths about goods and prices to make strong impressions without using boomerang lies.

"Write—rewrite, and again rewrite.

"It is worth every thinking and writing effort."

"For advertising space is costly, and an idea poorly put may lose a sale—yes, several."

A MODERN ADVERTISING AGENCY

It was Josh Billings who declared "I don't kar how much a man sez, if he tells it in a few words." Having something to say, and saying it in a direct, pleasing and convincing way is as necessary to the completions of a good advertisement as it is to the equipment of a successful salesman. In advertising Canadian industries the same careful attention should be given to it, as to the other details of business.

There is much advertising which appears that is of doubtful value, owing to lack of preparation of the copy. In advertising almost everything depends upon the way the copy is prepared and written. You have to impress upon the customer the points of superiority in your article, so as to induce him to buy with the least resistance possible. Asserting that your article is "the best," or exhausting your supply of superlatives in its favor, won't do. You will have to show why it is better.

Following the copy next in importance is the selection of media and the judging of the space to be used in each to bring results.

Expert Advice Needed.

"At the very commencement of an advertising campaign the manufacturer should call in expert advertising advice," says Mr. MacDonald in the course of his article "outlining an advertising campaign" in the November issue of INDUSTRIAL CANADA. This is the age of specialization, and since the advent of such an active and aggressive Agency as the Woods-Norris, Limited, the question where to obtain expert advertising advice practically answers itself. To the shrewd business man who has decided upon an extensive advertising campaign, involving the expenditure of no inconsiderable amount of money, his first step will be the obtaining of the co-operation of an advertising agency that will relieve him of all responsibility in the matter, and in whom he has implicit confidence that the greatest results possible will be attained.

Woods-Norris, Limited, have by the application of new methods and ideas made the Advertising Agency an important factor in Canadian business. It is as much to their interest as to that of their customer that advertising entrusted to them should be fruitful of results. If, as advertising salesmen, they can bring you business, it is a reasonable certainty they will retain your patronage. It is for this reason that the closest attention is paid to every detail when an advertising account is placed with them.

Well Equipped Offices.

The rise and progress of the Woods-Norris Agency is at once a tribute to the enterprise of the members of the firm, and an indication of the need for just such a modern vehicle of publicity. Starting some three years ago as the J. H. Woods Advertising Agency, Limited, the business has grown to such proportions that towards the close of 1906 a change was decided upon. Mr. C. C. Norris, for many years advertising manager of the "Mail and Empire," became associated with Mr. Woods, the firm name being changed to Woods-Norris, Limited. More extensive quarters were required, and the firm obtained a lease of the entire front floor of the second flat of the Mail building, overlooking King Street. The offices are commodious, splendidly lighted, well ventilated and finely equipped. There is a floor space of one thousand, eight hundred feet, and it is arranged and fitted out systematically. The various departments are marked off with railings, according to the up-to-date principle of office arrangement of having the whole office workings exposed to view.

At the entrance to the offices there is an enclosure, formed by a writing counter, which is utilized as a waiting room. Opening off this are the private offices of Messrs. J. H. Woods and C. C. Norris, the principals of the company, and further on the board room.

The Staff.

The main offices are about seventy feet by forty feet. In one corner is the office of Mr. F. Albany Rowlatt, chief of the Promotion Department, and next to that the office of Miss McLean, the treasurer. Adjoining this is the accountant's department, with large accounting desks and the stenographers' desks arranged around the wall. The next department is the copy-writing and art department, presided over by Mr. J. D. Logan, Ph.D. (Harvard), formerly of the editorial and publicity staff of Siegel Cooper Company, New York. Associated with Mr. Logan is Mr. M. B. McDonald, late of the editorial staff of the "Mail and Empire."

Beyond this again is the checking department to which considerable space has been given. It is presided over by Mr. Fred. Forrest. Here Canadian and foreign papers and magazines, after being checked, are filed under a system which will admit of the men in charge placing their hands on any paper required at a few moments' notice. Next come the shelves where the cuts are kept, according to a special tabulated system, and then the vaults in which the original copy and drawings are kept. These drawings are often of considerable value, as in many cases the drawing used is the best of a number handed in by several competing artists.

Members of the Firm.

Mr. J. H. Woods, founder of the firm, has had a long and varied experience in the newspaper and advertising field. Before entering the agency business he was associated with the "Mail and Empire," the Toronto "News," the Montreal "Herald," and several Western papers. He has given very close attention to the needs and requirements of a modern Advertising Agency, and has perfected a system for the placing and checking of large advertising contracts not excelled on this continent.

Mr. C. C. Norris has had long experience as an advertising man. He started his advertising career with the Toronto "Globe," and for the past eighteen years was connected with the "Mail and Empire," for eight years of which he was manager of the advertising department of that paper.

From their wide connection Messrs. Woods and Norris have been highly successful in arranging for space contracts with newspapers, highly advantageous to their clients. All facts considered, Woods-Norris, Limited, are destined to play an important part in the successful advertising of Canadian industries. For some time past this firm have been handling the advertising business of many of the largest users of printers' ink in Canada. It has been done with an originality, thoroughness and effectiveness worthy of all commendation. Woods-Norris stand prepared to furnish estimates on newspaper and all other forms of advertising, and to supply designs for catalogues, booklets, signs, etc., to prepare such matter and have it printed and turned out at the minimum of cost consistent with good workmanship. Intending advertisers looking for results should consult this firm.

THE WORLD'S RUBBER PRODUCTION.

The world's rubber production for 1906 is estimated to amount to 70,000 tons, of which quantity 60 per cent., or 42,000 tons, is the output of South America. Of these 42,000 tons, Brazil provided 35,000 tons or more, or 50 per cent. of the whole world's production, the value of the Brazilian output being, roughly, $82,730,000. Nearly the whole of the 42,000 tons from South America is natural grown rubber, and nearly the whole of the 35,000 tons is the produce of the Amazon and its tributaries. This production is absolutely essential to the manufacturing industry, for, notwithstanding occasional temporarily lower prices, there is no question that the demand is increasing at a ratio in excess of that of the supply. All the plantation rubber will be required, and more than can be grown. At present the output of plantation rubber is about 1,000 tons per annum, or about 1½ per cent. of the whole, while Brazil provides 50 per cent. of the whole. The two productions can not be compared. Even when, and if in the course of time the production of cultivated rubber reaches 20,000 tons, it is improbable that the price will be affected in any really appreciable manner. The value of plantation rubber is leveling down to that of fine Para, the relative price being about $1.22 for Brazilian, fine Para, $1.32 or $1.34 for good grade plantation Para. A year ago there was a difference of from 20 to 25 cents. More manufacturers seem to be preferring plantation rubber in block form rather than in biscuit or sheet form, as there is less risk of deterioration.

¶ It is the aim of The Dunlop Company to extend the trade mark, the two hands, into as many branches of the rubber making industry as are open to exploitation. Following this line of progress we have pleasure in announcing the near completion of an extensive addition to our factory for the making of every grade of rubber hose, wire wound and plain. While our stock lines will include rubber hose for every general purpose, special lines will also be made up, as ordered, to fill any particular specification.



The Dunlop Tire and Rubber Goods Co., Limited, Toronto.

January of 1907

finds

The News

in a better position than at any time in its history to cater to the requirements of Readers and Advertisers.

It is now undoubtedly not only "the Evening Paper most people read," but "the Evening Paper most good Advertisers use."

During 1906, THE NEWS has been improved, enlarged, and kept up to the limit of progressiveness in every department, resulting in a largely increased circulation.

This is an important point to Advertisers, because each new Subscriber means so much more revenue producing power from the Advertisements.

That Advertisers are taking advantage of the ever increasing importance of THE NEWS is evidenced by the fact that—

59,469 more lines were used in **Oct.**
78,410 " " " **Nov.**
63,883 " " " **Dec.** of **1906**

than were used in Advertising in the corresponding three months of 1905.

This is significant—Use the paper other Advertisers find profit in using. Only one rate, 4 Cents per line.

The News, Toronto

MADE IN CANADA

THE STEEL RAIL MILL OF

The Algoma Steel Co., Limited, Sault Ste. Marie, Ont.

IS NOW IN OPERATION AND TURNING OUT

A.S.C.E. STANDARD SECTION

Steel Rails

OF HIGHEST QUALITY

Your Specification will have our best attention

OFFICES
Canada Life Building
MONTREAL
100 King Street West
TORONTO

DRUMMOND, McCALL & CO.

General Sales Agents
THE ALGOMA STEEL CO., Limited

Too Expensive For My Business!

BUSINESS SYSTEMS LIMITED. SYSTEM THE SECRET OF SUCCESS TORONTO.

Any retailer who says that about Business Systems, is laboring under a delusion.

The size of a business is the factor that determines the cost of installing Business Systems.

Business Systems are, proportionately, just as much an economy for the smallest retail store as for the largest factory.

■ ■ ■ ■ ■ ■

In different businesses, Business Systems are designed to fit different ends.

In your business, Mr. Retailer, Business Systems, instead of being "too expensive," are time savers and an actual economy.

You can understand why a system that posts your books and writes out your bills at the same time, is economical, can't you?

That's only one of the things Business Systems will do for you.

■ ■ ■ ■ ■ ■

Let us tell you more.

Drop us a post card and we will send you all the details.

It will only cost you a cent to know more.

BUSINESS SYSTEMS
LIMITED
90 SPADINA AVE.
TORONTO, CANADA

TRACK AND RAILWAY SUPPLIES

HAND CARS - PUSH CARS

TRACK SCALES

BAGGAGE SCALES STOCK SCALES

SCREW JACKS RATCHET JACKS

BALL BEARING JACKS

TRACK DRILLS WRECKING INCLINES

SEMAPHORE AND SWITCH STANDS

A full line of specialties made by **BUDA FOUNDRY AND MFG. CO.**
carried in stock by

CANADA FOUNDRY CO.

LIMITED

Head Office and Works: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland

SADLER & HAWORTH

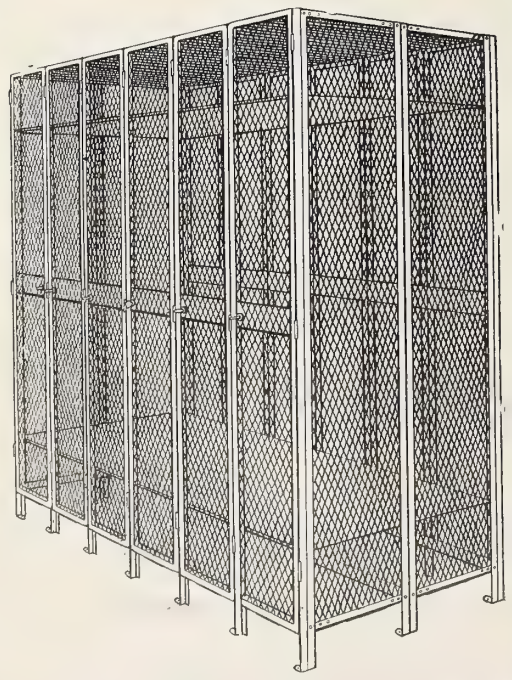
TORONTO MONTREAL

SPECIAL "CROWN BRAND"

Is an exceedingly high grade — made for extra heavy work. Each and every foot is cut from specially selected heavy leather. It will do more work, give better satisfaction, and last longer than any other belting made.

LEATHER BELTING

Every up-to-date factory counts a proper LOCKER SYSTEM a necessity, it saves money.



WRITE US ABOUT YOUR REQUIREMENTS.

—

The

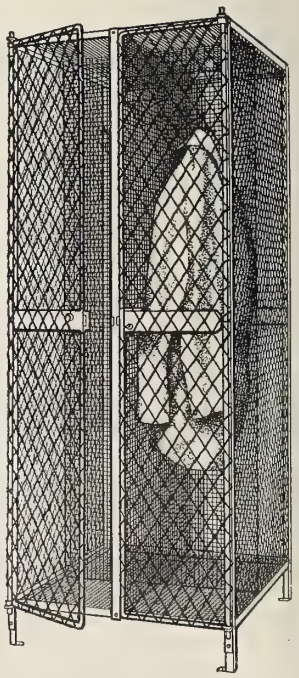
Geo. B. Meadows

TORONTO WIRE, IRON AND BRASS WORKS COMPANY, LIMITED,

67 Wellington Place,

Toronto

Canada



THE CONSOLIDATED MINING AND SMELTING CO. OF CANADA LTD.

Head Office and Works - TRAIL, BRITISH COLUMBIA

SMELTERS AND REFINERS

Purchasers of all Classes of Ores. Producers of

FINE GOLD, FINE SILVER, BASE BULLION,
COPPER MATTE, BLUESTONE, LEAD PIPE
AND

PIG LEAD

TRAIL BRAND--THE PUREST PRODUCED ANYWHERE

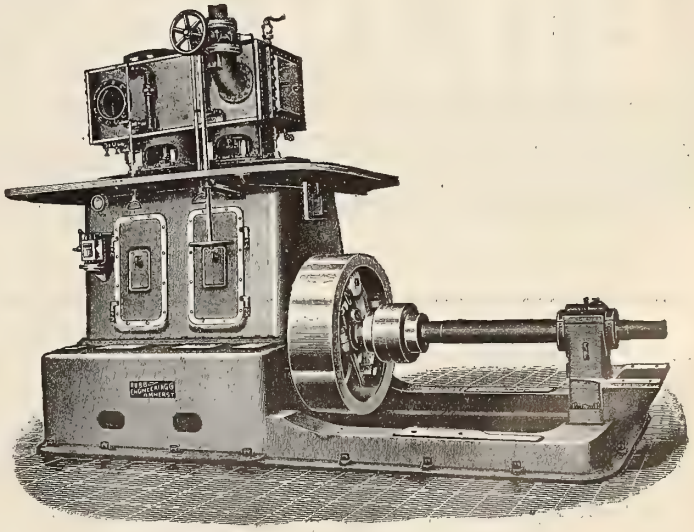
(Analyzes 99.995% pure.)

VERTICAL ENCLOSED ENGINES

We are prepared to supply high speed vertical enclosed engines of the English type, up to 750 horse power.

The oiling system of these engines is under a pressure of 15 lbs. to the square inch ensuring a copious supply of oil to all bearings.

They have Robb-Armstrong automatic governors and Sweet balanced valves giving the best regulation and highest economy.



ROBB ENGINEERING CO., Limited, Amherst, N.S.

DISTRICT OFFICES:
320 Ossington Avenue, TORONTO; Wm. McKay, Manager
Bell Telephone Building, MONTREAL; Watson Jack, Manager
355 Carlton Street, WINNIPEG; J. F. Porter, Manager

ST. LAWRENCE SUPPLY CO.

Limited

Manufacturers in Iron and Steel

Contractors' Equipment
Railway Specialties
Iron and Steel Forgings
Engineers and Machinists

All descriptions of special machinery manufactured to order

Catalogues and Quotations on application

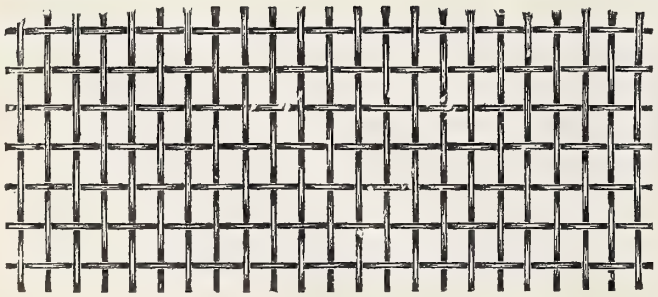
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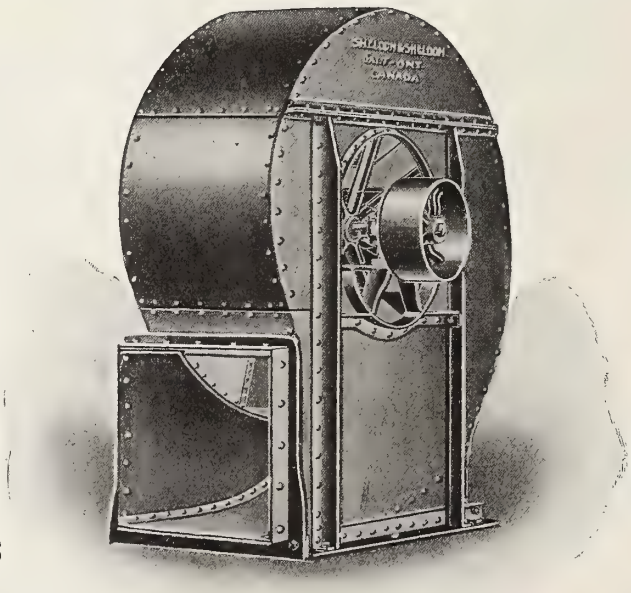
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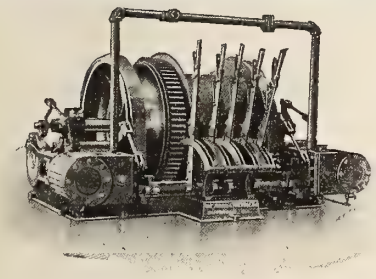
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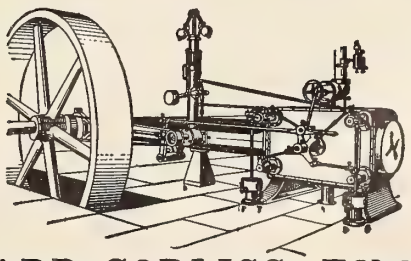
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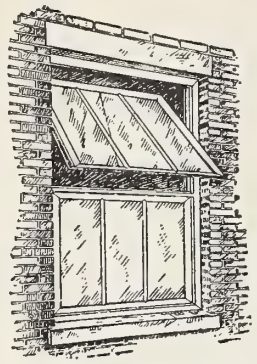


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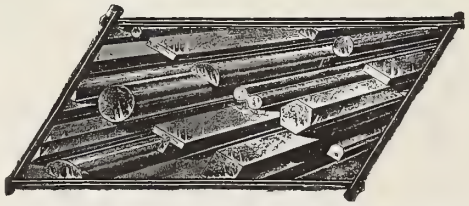
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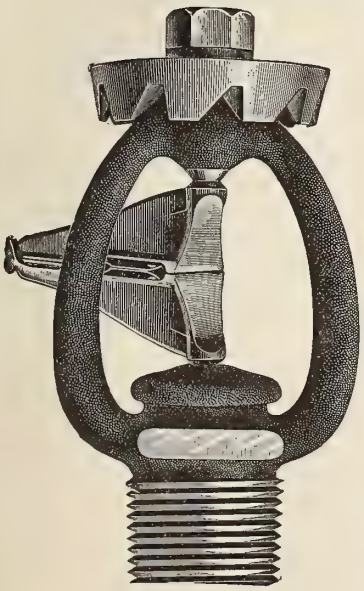
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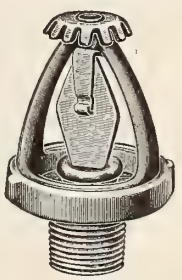
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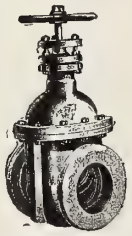
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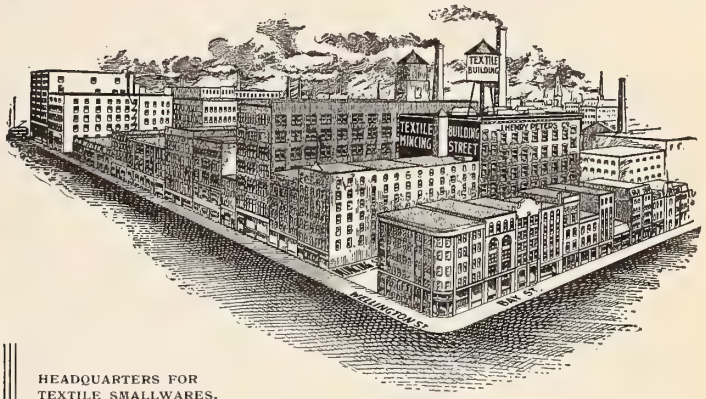
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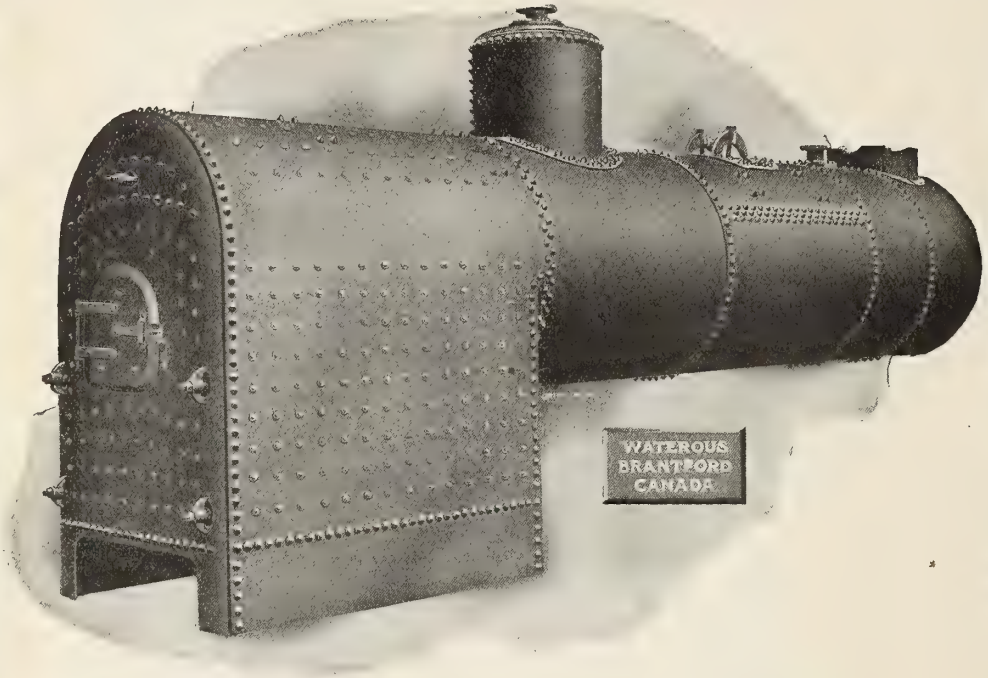
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EXECUTIVE COUNCIL

JANUARY MEETING.

The regular monthly meeting of the Executive Council was held in the Council Chamber of the Board of Trade, Montreal, on Thursday, January 17th, at 2.15 p. m.

The President, Mr. Harry Cockshutt, occupied the chair and there were also present Messrs. Geo. E. Amyot, Quebec; G. Frank Beer, Toronto; C. Bermingham, Kingston; F. Birks, Montreal; Geo. Booth, Toronto; Geo. Brigden, Toronto; J. H. Burland, Montreal; F. J. Campbell, Windsor Mills; Jas. Davidson, Montreal; J. S. N. Dougall, Montreal; S. W. Ewing, Montreal; F. W. Fairman, Montreal; D. J. Fraser, St. Johns; W. K. George, Toronto; P. Hamill, Montreal; Lloyd Harris, Brantford; T. S. Hethrington, Quebec; J. Hewton, Kingston; Jos. Horsfall, Montreal; J. H. Housser, Toronto; J. M. Jenckes, Sherbrooke; J. R. Kinghorn, Montreal; Wm. Levis, Halifax; A. G. Lomas, Sherbrooke; Alex. MacLaren, Barnet, B. C.; J. B. MacLean, Toronto; J. J. McGill, Montreal; Wm. McMaster, Montreal; Denis Murphy, Ottawa; J. P. Murray, Toronto; E. Peck, Montreal; J. D. Rolland, Montreal; Frank A. Rolph, Toronto; S. W. Sadler, Montreal; Alex. Saunders, Goderich; Louis Simpson, Valleyfield; J. M. Sinclair, Toronto; Wm. Smaill, Montreal; T. A. Staunton, Toronto; T. J. Storey, Brockville; E. Tougas, Montreal; G. A. Vandry, Quebec; Geo. W. Watts, Toronto; R. J. Whyte, Smith's Falls; R. C. Wilkins, Montreal; C. I. I. Wilson, Ingersoll; Daniel Wilson, Collingwood.

Communications.

(a) Letters regretting their inability to be present were received from Messrs. H. Bertram, W. C. Breckenridge, L. J. Breithaupt, J. A. Coulter, W. W. Doran, H. W. Fleury, Geo. D. Forbes, J. Goldie, E. G. Henderson, J. I. A. Hunt, Jas. Maxwell, J. P. Myler, J. A. Publow, John Ransford, Wm. Robins, T. A. Russell, T. H. Smallman, H. Stroud, Geo. Sweet, J. M. Taylor, R. Thomson, R. L. Torrance, S. J. Williams, Hugh Blain, C. N. Candee, L. V. Dusseau, Thos. Findley, Ed. J. Freyseng, Geo. Gillies, R. S. Gourlay, Thos. Roden, J. T. Sheridan, F. J. Smale, A. W. Thomas, W. H. Rowley, John McKechnie, W. H. Clark, C. A. Birge, J. F. Ellis, A. E. Kemp, B. Rosamond, Edward Gurney, Edward L. Drewry, W. R. Landon, R. O. McCulloch, A. Nordheimer, Geo. McLagan, Chas. S. Meek, A. S. Rogers, John Hendry, C. M. Crockett, R. McLaughlin, Dr. Ed. Morin, Jas. Playfair, F. W. Jones and A. E. Cross.

(b) A communication from the Canadian Section of the British Chamber of Commerce, Paris, urging the Association to support a resolution favoring an extension of the most favored nation treatment to a much larger number of Canadian products, was referred to the Commercial Intelligence Committee.

(c) An invitation was read from Mr. Alfred Burton, Honorary Secretary of the Canadian Section of the Society of Chemical Industry, inviting all the members of the Manufacturers Association to attend the dinner to be held the same evening in St. Lawrence Hall.

The Secretary reported that it was usual at the January meeting of the Council to consider the place and date of the Annual Meeting of the Association. This matter was left to the Reception and Membership Committee for report.

A request from the Board of the Western Fair, London, asking the Association to nominate its representatives for 1907, resulted in the appointment of Messrs. Arthur W. White and H. T. Reason.

Reports of officers and Committees were then presented as follows:

SECRETARY.

The Secretary reported that since the last meeting the head office of the Association had been moved to its new permanent quarters in the Traders' Bank Building Toronto, where it was believed the work of the Association could be handled to much better advantage, and where he would be pleased at all times to meet any members who could make it convenient to call.

TREASURER.

The Treasurer, Mr. Geo. Booth, read a statement covering monthly receipts and disbursements for December, which was received with satisfaction.

FINANCE COMMITTEE.

The report of the Finance Committee recommended for payment the customary monthly accounts, amounting in all to $1,509.53.

No appointment of an Assistant Secretary had yet been made, but two applications were under consideration, and the Committee asked authority from the Council to make the appointment as soon as a decision had been arrived at.

The adoption of the report, moved by Mr. R. J. Younge, seconded by Mr. Denis Murphy, was carried.

"INDUSTRIAL CANADA."

Mr. Geo. Brigden, Chairman, presented the report of the "Industrial Canada" Committee. It showed a cash surplus on the paper's business to December 31st, of $775.90, and a revenue surplus for the six months ending January of $2,259.27.

In view of the uncertain conditions prevailing in the printing trades, it had been decided not to call for new tenders for the present, but to accept the offer of the "Monetary Times" to continue the printing at an advance of 10 per cent.

A series of articles on "Factory Costs," "Manufacturing Centres," and "Smoke Prevention," had been approved of.

The adoption of the report, moved by Mr. Brigden, seconded by Mr. Booth, was carried.

TECHNICAL EDUCATION COMMITTEE.

The report of the Technical Education Committee was presented by Mr. Frank A. Rolph.

The appointment of Messrs. W. T. Whitehead and L. H. Packard as representatives from the Montreal Branch on the Committee, had been received and approved.

A request from the Toronto Branch Executive Committee for advice in the matter of prizes for the Toronto Technical High School had been considered, and before action would be taken a general line of policy would be laid down, which would govern similar requests from other Branches should they be received.

Since the presentation of the memorial to the Government in May, 1906, asking for the appointment of a Commission of Enquiry on Technical Education, no announcement had been made as to the Government's intentions. In order that the matter might not be lost sight of, the Committee had been urging the leading Boards of Trade throughout Canada to pass resolutions supporting its request, and to forward copies of these resolutions direct to the Government. In all some twenty-five Boards of Trade had placed themselves on record as being in accord with the attitude of the Association. It was the intention of the Committee to have these resolutions printed in the form of an appendix to the memorial, and to place a copy in the hands of every Member of Parliament.

The adoption of the report, moved by Mr. Rolph, seconded by Mr. J. P. Murray, was carried.

TARIFF COMMITTEE.

The report of the Tariff Committee was largely taken up with the memorial which the Association would present to the Government, embodying its views on the proposed revision. The text of this memorial as finally adopted is as follows:—

The Executive Council of the Canadian Manufacturers' Association beg respectfully to present to Parliament and to the people of Canada the determinations that they, as practical business men, have arrived at in respect to the present tariff situation in Canada, and the proposed tariff now before Parliament.

The aim of the Canadian Manufacturers' Association, in so far as the fiscal policy of the country is concerned, has always been to secure for Canada a customs tariff which would not only encourage a logical development of industries already established, but would serve as an incentive to investors to undertake new enterprises.

The proposed tariff will not, in our opinion, encourage either the establishment of new industries or the further development of those already established. Its mere announcement has caused the abandonment not only of many proposed extensions of existing industries, but also of new enterprises which, if carried out, would have secured to Canada the investment of millions of dollars.

During the past four years all industrial nations have been experiencing unexampled prosperity, and as a consequence the manufacturing industries of Canada, generally speaking, have secured a fair share of the increasing Canadian market. But even under these conditions, certain manufacturing industries have been exposed under the tariff hitherto in operation to unequal and unfair competition, and in a number of cases the situation is even more serious than before. The difficulties of these special industries have been repeatedly brought to the notice of the Government, and it has further been pointed out to the Government that millions of dollars' worth of goods were being annually imported into Canada, which might, under proper tariff conditions, be manufactured at home, to the immense advantage of workmen, farmers, investors and Canadians generally.

The present prosperity of Canada and the fact that the world is awake to her immense potentialities, suggests that it is the part of wisdom to encourage now the prompt investment of Canadian, British and foreign capital in our industrial enterprises, and this in our opinion can only be done by the introduction of a national tariff sufficiently protective. It is when workmen are busy and the country generally prosperous, that a real Canadian policy can best be adopted. When the inevitable depression comes an increase in the tariff will not attract capital. Competition from nations which are already industrially developed or highly protected, forces such a policy upon Canada if its industries are to be developed in times of prosperity and maintained in times of depression.

We respectfully submit that we were warranted in believing that the new tariff would impose a higher scale of duties on articles coming from countries which maintain high tariffs against Canada. The maximum schedule as submitted is, however, to all intents and purposes, the same as the old general tariff which has already been found insufficient to secure the extension of existing enterprises or, in the case of some industries, even keep them alive.

The intermediate tariff is considerably lower than the old general tariff. It is an innovation which will, if agreed upon, stand as a continuous invitation to countries competing with Canada to negotiate with a view to having it made effective. If the same should at any time become operative in favor of any of Canada's competitors, it would deal a blow to Canadian enterprises, and prove disastrous to many lines of industry. The Government is to be given authority to make the same apply to any foreign country, without receiving the consent of Parliament, and as long as Canada's development is menaced by the unknown possibilities of such a tariff, capital will remain timid, present industries will not be developed, nor will the establishment of new ones be encouraged.

The principle of a mutual preferential arrangement with Great Britain is endorsed, but the present schedule fails to put certain Canadian producers on an equitable basis with their competitors in Great Britain, who enjoy many advantages tending to cheaper production.

INSURANCE COMMITTEE.

Mr. E. P. Heaton read the report of the Insurance Committee, as follows:—

The several fires that have occurred in Montreal since the early part of December, in which a number of our members have suffered loss, have presented opportunities for the advantageous use of the Department in the adjustment of claims upon the Insurance Companies. The entire available time of the Manager for the past six weeks has been fully occupied in this way, and the Committee has again pleasure in recording that the Department has efficiently protected the interests of the members to their satisfaction, and with a full measure of support to its finances.

The Committee have once again to draw particular attention to the fact that members of the Association seem to pay very little attention to the terms and conditions of their Fire Insurance policies before the occurrence of a fire renders a close examination of their contracts necessary. Even in the City of Montreal, where it might be reasonably presumed the insurance agents would give to the insured the benefit of intelligently drawn policies free from ambiguity or imperfectly understood conditions, it is manifest from the policies that have been the subject of recent claims in this city, that little regard is paid by the average agent to the insurer's best interest, and equally that the insured is much too confiding in the acceptance of such contracts without examination or check of any kind.

The Committee wish to record this statement in plain and unmistakable terms, for, from the Manager's reports, it would seem that in nearly all cases where he has been called upon to assist in the adjustment of fire claims, the insured has sustained loss over and above that paid by the Companies by reason of imperfectly drawn contracts, which might have been avoided if ordinary care had been exer-

cised in the first instance. No word of complaint can be uttered against the Insurance Companies or the adjusters representing them, who have in every case shown a commendable desire to be prompt in their settlements and liberal in the interpretation of their obligations, but they cannot exceed the scope of the contract, nor waive conditions that have been accepted by the insured.

The Insurance Department might evidently be much more profitably employed by our members in supervising and correcting policies before the happening of a loss, rather than in striving to adjust difficulties after a fire has happened.

The Committee is inclined to the opinion that the Department should endeavor to interest the members in the particular line of policy examination and correction before the occurrence of a fire to a much greater degree than the conditions under which they are operating have in the past enabled them to do, and the whole subject is now under consideration with a view to the adoption of a policy that will bring this about. It is hoped that at the next meeting of the Council the definite conclusions of the Committee may be reported for consideration.

The adoption of the report, moved by Mr. Alex. Saunders, seconded by Mr. G. Frank Beer, was carried.

RAILWAY AND TRANSPORTATION COMMITTEE.

The report of the Railway and Transportation Committee was read by the Chairman, Mr. J. H. Housser. It was as follows:

At the monthly meeting of the Committee, which was held in Toronto on the 11th of January, the following matters were dealt with:

Classification of Stoves.

The Manager of the Department reported that his negotiations for reduced rates on stoves had resulted in the submission of a completely revised classification in which the third-class rating is to be given for stoves in less than carloads. It will be remembered that some time ago the Department was successful in securing a reduction in the rating for carloads to the fifth-class basis, and the additional reduction to third-class for less than carloads will effect a considerable saving in freight costs to the stove manufacturers.

Minimum Weight on Furniture to the Coast.

The Department has been negotiating with the railways at the instance of the furniture manufacturers, looking to a reduction in the minimum weight on furniture in carloads. Some time since the rate on furniture in carloads was $2.08 per 100 lbs. A reduction was secured to the basis of $1.75, but the minimum weight was placed at 16,000 lbs per standard car. The manufacturers have been endeavoring to secure a further reduction to the basis of the classification minimum of 14,000 lbs. As a result of the negotiations by the Department the railways have now agreed to reduce the minimum weight to this basis, providing the manufacturers will consent to a compromise adjustment of the rate.

Traffic Forms.

The Railway Commission have set January 8th as the final date for the submission of revised forms of contract and other traffic forms by the various railway companies. Your Committee understand that before these forms are approved copies will be furnished to the Association and other kindred associations, and an opportunity given to shippers to file any objection to the terms included therein. Your Committee recogni an important matter as it involves the deter terms upon which railways may contract t and the extent to which they may limit the loss or injury to goods entrusted to them. tee consisting of the Chairman, Secretary an the Department was authorized as soon as forms are available. to take action towards bers of the objectionable features in the prc and arranging to submit their views to the mission.

London Interswitching Case.

The appeal of the Grand Trunk Railway against the cision of the Railway Commission in the London in switching case has been heard and dismissed. It will be membered that the Railway Commission ordered the in change of freight traffic between the Canadian Pacific the Grand Trunk Railway Companies at London, ing the companies to protect the published rates to the sidings upon which the freight was delivere out the addition of a switching charge for the inte The Grand Trunk objected to this order on the grou they did not receive sufficient compensation becau order only provided for a reasonable switching al instead of remuneration for the loss of traffic whic' be diverted to the Canadian Pacific lines by the inte The result of the Supreme Court's decision is to the Commission in requiring the adoption of th to the final destination without the addition of charges where traffic is interchanged in terminals a very important decision as it sets at rest the rig pers to require railway companies to grant throu related to the whole distance over which the transported, and not to be made up on the basis rates to one terminal plus the local rate or charges beyond.

International Freight Rates.

The question of adjustment of international rat prevent discrimination against Canadian shippers i pending before the Railway Commission. At a co in Montreal on the 19th of December, at which the way Commission and this Association were represen plan submitted by the railways was discussed and tions of the Association with regard thereto wer stated. It was decided to recast the plan on a lov and to submit new tables of rates during the currer

Car Shortage—Reciprocal Demurrage.

In view of the persistent complaints regarding short of cars, the matter was brought to the attention of the Co mittee by the Manager of the Department. It was point out that the Association is already on record before th Railway Commission as demanding reciprocal demurra where railways fail to supply empty cars within a rea able time, or fail to transport traffic with reas despatch, or to place loaded cars without delay after at destination for unloading as required by the Railw The question was very fully discussed by the Com but it was not considered that any further action cou taken until the matter is taken up by the Railway mission.

Mr. J. E. Walsh, who is to succeed Mr. Marlow Manager of the Transportation Department, joined th staff of the Association on the 27th of December, and sin

s, in company with Mr. Marlow, been care-
the work of the Department, more particu-
ters which have not yet been closed.
the adoption of this report Mr. Housser
t a resolution to the effect that the Finance
instructed to vote an appropriation for the
curing a suitable memento to be presented to
Manager of the Transportation Department,
rlow, as a mark of the Association's appreciа-
plendid work he had done in the interests of
embership.
. Hethrington seconded Mr. Housser's motion,
rried.

PARLIAMENTARY COMMITTEE.

In the absence of the Chairman, the report of the Parnentary Committee was read by the Secretary.

Your Parliamentary Committee beg to report on the ert matters considered during the past month as :—

Eight-Hour Day Bill.

e last meeting of the Executive Council authorized nmittee to oppose this bill which is now before Par- , and which provides that no workman shall be to work more than eight hours per day on any Gov- contract. The Premier was accordingly notified pposition of the Association, and a formal acknowl- has been received of the communication addressed

sv

Foreign Labor Agents.

ht now before the Senate intended to restrict the foreign labor agents was endorsed at the r meeting of the Council, and the Committee have ion by putting the bill before the members of the n in a circular letter.

British Legislation.

t as already been reported to the Council that Mr. Mackenzie King, Deputy Minister of Labor, who was o Great Britain to have an Act passed by the British nent to make it a criminal offence to induce or deter ion by false representation, had not been successful mission, and that the legislation which was passed overed misrepresentation to induce emigration. The nentary Committee lost no time in bringing this to ention of the Minister of Labor, and received from ry assurance that no effort would be spared to have amended as requested by the Committee. In this, , the Minister was not successful. The Committee ow recommend that an account of this legislation action of the Association be published in INDUSTRIAL NADA.

Ontario Companies Act.

This Act, which will be considered at the coming session of the Legislature, solidifies and puts in much more irable shape than at present the different Acts relating mpany organization. The Committee have decided on ecommendations which they consider it advisable to out the Act will be further considered at an early date.

Pawnbrokers.

The resolution of the Association for a more stringent ulation of pawn broking establishments has received the pproval of the Crown Attorney and the Chief of Police of Toronto, and is now before the Provincial Government for eir consideration.

Union Label on School Books.

A memorial has been prepared protesting against the Ontario Government acceding to the wishes of the labor unions and making it compulsory for school books to bear the union label.

Ontario Assessment Act.

The Committee decided to ask the Association's solicitors to draft a bill for presentation to the coming session of the Legislature to amend the Ontario Assessment Act in the following particulars:—

(1) Reduction of business assessment on manufacturers from 60 to 50 per cent.

(2) Shareholders who are officers in incorporated companies should be on the same basis as partners in a partnership as far as assessment on income is concerned.

(3) Employers should not be responsible for the delivery of assessment and tax notices.

The Chief Engineer of the Ontario Power Commission in response to an enquiry advised the Committee that the available water supply in a large number of streams was being measured, and that fairly accurate estimates of the amount of power available could now be secured, and further, that this work was being continued at the present time.

The adoption of the report, moved by Mr. C. I. I. Wilson, seconded by Mr. Alex. Saunders, was carried.

Mr. C. H. Waterous stated that he would like the Committee to take steps to secure uniform boiler legislation throughout the different Provinces of the Dominion. It was suggested by the President that this might better be handled in its preliminary stages through the Engine and Boiler Section.

British Office Committee.

The report of the British Office Committee, read by Mr. Geo. W. Watts, recommended that a request received from the Manitoba Branch for permission to carry on correspondence direct with Mr. Louis Leopold be granted, providing that—

(1) Copies of all correspondence emanating from either end be forwarded by concurrent mail to the head office.

(2) That a local committee should pass on all applications before they were sent out.

A draft circular of advice and draft application forms were attached to the report.

The clause in the former dealing with the scale of charges for securing help for members was, at the request of the Chairman, referred back to the Committee for further consideration.

Reception and Membership Committee.

The report of the Reception and Membership Committee recommended for acceptance eleven applications for membership, the names of which appear in another column.

It reported that the dinner to Mr. Richard Grigg and Mr. Graham Gow had been held in Toronto on the 15th inst., and that while the attendance was small the function had passed off satisfactorily.

The adoption of the report, moved by Mr. G. Frank Beer, seconded by Mr. Geo. Brigden, was carried.

Branches.

The report of the Montreal Branch was read by Mr. J. S. N. Dougall, and of the Toronto Branch by Mr. J. P. Murray. Both of these will be found elsewhere.

Moved by Mr. Lloyd Harris, seconded by Mr. Denis Murphy, that the thanks of the Executive Council be tendered the Montreal members for their hospitality; also to the Montreal Board of Trade for the use of their room. Carried with applause.

The meeting adjourned at 5.25.

MONTREAL BRANCH.

The Montreal Branch begs to report a month of great activity.

As already reported a proposal has been before the City Council to extend the gas and electric franchise of the Montreal Light, Heat & Power Co., for a period of thirty years; and at the same time grant to this company the exclusive right to supply gas and electricity to the citizens. The probability that such a contract might be entered into became so great that on December 19th a special meeting of the Montreal Executive was held, and a strong objection made to it.

So that there would be no mistake about the attitude of the Association on this important matter, a legal protest was drawn up and served upon the City Council, and in addition a copy of the resolution was delivered into the hands of every alderman in the city. Such a protest was raised in regard to the proposed extension of franchise that the matter has been held over by the City Council, and it is now reported in the daily press that the monopoly clauses are to be struck out of the agreement.

The legal opinion obtained by the Committee was also to the effect that the city had no power to grant an exclusive franchise to any company to use the streets of the city.

At the regular monthly meeting of the Executive Committee on January 10th, a number of important matters were taken up. Complaints were received in regard to the irregularities of the mail service, and the Secretary was instructed to bring this matter to the attention of the Postmaster-General.

The Montreal Gold and Silversmiths' Section requested that the Montreal Branch should take steps to enquire into the Quebec law bearing on apprentices, and to find out what protection the employer had in the event of an apprentice breaking his agreement. This was referred to the Branch Legislation Committee.

The Branch Legislation Committee have given careful consideration to the Archambault bill for compensation of workmen, and have also had prepared by a lawyer an amendment to the Quebec Garnishee Law so as to allow employers to make a written declaraion when wages of their workmen are seized for small debts, and thus save unnecessary appearance in court.

During the past month two large fires occurred which burned out twelve of our members. Prompt action in these cases was taken by the Association, and the insurance manager has successfully adjusted several of the losses to the satisfaction of the members concerned.

TORONTO BRANCH.

At the regularly monthly meeting of the Toronto Branch Executive, held on January 10th, a great deal of interest was manifested in the applications of certain railways for permission to enter the city from the east via the water-front. In view of the fact that the railways already control all the water-front except that portion lying east of the Don, it was felt that strong steps should be taken to preserve for the citizens permanent access to the beach, should such a course be found compatible with the best interests of the city in the way of transportation facilities. It was decided after a thorough discussion to recommend to the Board of Control:

1. That the application of the railways should be granted only after it had been demonstrated by competent engineers that no other route was satisfactory.

2. That all the railways should be requir city from the east over a common right of way.

3. That over this right of way there should crossings.

Following the passage of the plebiscite on power, it was felt by the Committee that imme should be taken to secure data from the manuf the city as to the amount of power they would be tion to contract for. A sub-committee was appoir out from the Hydro-Electric Power Commissio amount of horse-power that will be required in to the candle power used in incandescent ligh second, the cost of installing storage batteries size and capacity. With this information in han posed to issue a circular to members with a view taining the immediate market for power in the cit

NEW MEMBERS.

BELLEVILLE, ONT.

Belleville Portland Cement Co., Limited. Cement.

GLENCOE, ONT.

Glencoe-Woolens, Limited.—Knitted Goods.

Glencoe-Woolens, Limited.—(Geo. A. Griffi ber.)

MONTREAL.

Gillette Safety Razor Co.—Safety Razors a

ST. HYACINTHE, QUE.

Paquet & Godbout.—Doors, Sash, Church F

ST. JOHN, N. B.

G. E. Barbour Company, Limited.—Flav

TORONTO.

Avon Hosiery Co., Limited.—Hosiery.

The Blanchite Process Paint C Limited Enamels.

The Producer Gas Co.—Gas Engines.

WELLAND, ONT.

Plymouth Cordage Co.—Cordage.

YARMOUTH, N. S.

The New Burrell-Johnson Iron Co., Limi and Stationary Engines and Boilers.

Consolidation of Industrie

The consolidation of several large cor ish Columbia is proposed. For some time glish firm have held options on property They are interesting some of the biggest building companies in a project to establish British Columbia. This plan is to consolid Columbia Marine Railway, the Vancouver Works, the New Westminster Foundry and ings of iron and coal lands on the west coa drydock at Vancouver is part of the big building of steel vessels would constitute an i of the operations of the consolidated compan

The "Manitoba Free Press," of Winnipeg, h the Pipe of Peace to its friends, with a booklet co a sketch of the old Indian custom. The figures gives of Winnipeg's progress are no pipe dreams. The city has a most energetic and loyal press "Free Press."

...ENDMENT TO CITY CHARTER.

...nizing the importance of manufactures to the city ...ipeg Council have an amendment to their charter ... Legislature providing for special arrangements ...ifacturers without the necessity of submitting such ...to a vote of the people. The Council feel that ...res are coming to the West, and unless they can ...l inducements with other municipalities they will ...a the industrial race.

...llowing amendment has been proposed:

...s Act is hereby amended by inserting after ...an following new section:

...ie withstanding anything to the contrary con- ...ci provisions of their charter, the Council may ... ...ng the assessed value of the land in actual ...u ...on by any person, firm or corporation carry- ...cturing industry exclusively on such land at ...wn on the last revised assessment roll for ... period not exceeding twelve years without ...s...h by-law to the electors, but the buildings ...ed. ...e erected on such land shall be assessed in ... as assessable buildings are assessed under ... are not used for manufacturing purposes, ...used in such buildings for manufacturing pur- ...not be assessed. If before the expiration of said ...nited assessment, the person, firm or corporation ...arry on a manufacturing industry on such land, ...hitation or exemption shall cease. All by-laws ...rom taxation in whole or in part for a longer ... terms more favorable to the proprietors of such ...g industry shall be submitted to a vote of the ... The Council may embody in any by-law grant- ...emption or limitation in assessment, such further ...respecting such industry as it may deem ex- ...necessary as a condition of such exemption and ...nto any contract respecting same.

Another New Zealand Exhibit.

...New Zealand letter, which appeared in the Janu- ...ntaining mention of the various Canadian ex- ... New Zealand International Exhibition, the ... Wm. Gray & Sons Co., Limited, of Chatham, ...tantly omitted. This firm have an attractive ...riages, which has been specially noted by the ...missioner. Referring to the carriages which ...ap...rs that the designs turned out are exactly ...pa...d for that market. The high wheels are ...in...pository.

Situation Wanted.

... business man now managing a dairy engineer- ...plement manufacturing business in England (al- ...lived two years in Calgary, and desirous of re- ... next February or March) wishes position as ...esman, traveler or accountant. Twenty years ex- ...m implements, engineers' stores, tools, hard- ...neral machinery; smart active and reliable and ... to handling workmen; would invest small capi- ...uired, or would act as local representative to two ...ee Eastern firms on small salary and commission.

Stationary Engineer Wants Position.

...onary engineer at present employed desires a ... situation. Letters addressed to this office will ...ded.

The Sales Department

Your factory may be running smoothly, turning out a product that you are proud to put your name on and plenty of it too—but if the orders don't come in, it is disappointing.

It's up to the Sales Manager—

Help him—

Advertise—

The goods are right. You know it. The public would accept no other if they believed it.

Tell them about your goods in a series of well-written advertisements in THE MAIL & EMPIRE.

Your message will reach over forty thousand of the best homes in Toronto and Ontario.

No argument is quite so effective with the retailer as the inquiry for the brand from half a dozen of his best customers.

Your Sales Manager will find a year's well-written advertisements in THE MAIL & EMPIRE a wonderful stimulant to the salesmen as well as to the trade.

For rates Address :

Advertising Department,

Try THE MAIL & EMPIRE Help Wanted Column

THE MAIL & EMPIRE, Toronto.

AN OPEN SHOP.

The labor unions of Chicago have purchased a cemetery, where only members of the union may be buried.—News Item.

All his life in a union shop
He'd daily earned his bread;
They buried him in a union grave,
When the union man was dead.

He had a union doctor,
And he had a union nurse,
He had a union coffin,
And he had a union hearse.

They put him in a union grave
When he was good and dead;
They put a union monument
Just above his head.

And then he went to Heaven,
But to stay he didn't care:
He kicked because he said that some
Non-union men were there.

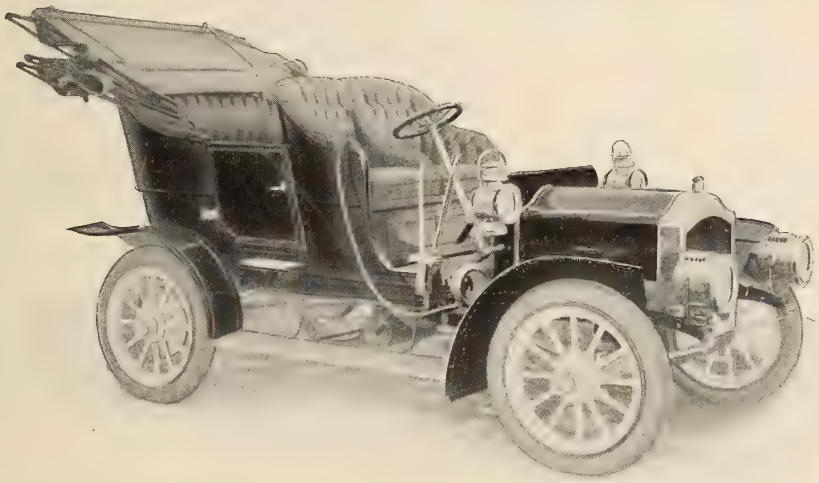
He went down to the Other Place,
And there produced his card;
Then Satan drew an earnest face,
And studied good and hard.

And then he laughed, his hands did rub
Till he thought he'd never stop;
"Lord bless your soul," said Beelzebub,
"Why, this is an open shop!"

Vol. VII. No. 8 MARCH, 1907 $1.00 per year

INDUSTRIAL CANADA

J C Hopkins
88 Church st



ONE OF THE RUSSELL THREE

MODEL "D." 2 Cylinder 18 H.P.—90 inch wheel base, 30 inch x 3½ inch tires - - $1,600
MODEL "E." 4 Cylinder 25 H.P.—104 inch wheel base, 32 inch x 4 inch tires - - 2,500
MODEL "F." 4 Cylinder 40 H.P.—113 inch wheel base, 34 inch x 4 inch and 4½ inch tires 3,750

CANADA CYCLE & MOTOR CO., LTD., TORONTO JUNCTION

BRANCHES:—WINNIPEG. VANCOUVER. MELBOURNE, Australia.

PUBLISHED MONTHLY *by* *The* CANADIAN MANUFACTURERS ASSOCIATION, *Incorporated.*

HEAD OFFICE, TORONTO.
BRANCH OFFICES, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, HALIFAX, QUEBEC.

SMART BAG CO.

LIMITED

BAGS in JUTE, BURLAP and COTTON
BAG PRINTING a specialty
JUTE CLOTH, HESSIANS, BURLAPS and PADDINGS
TWINES, ROPE, etc.

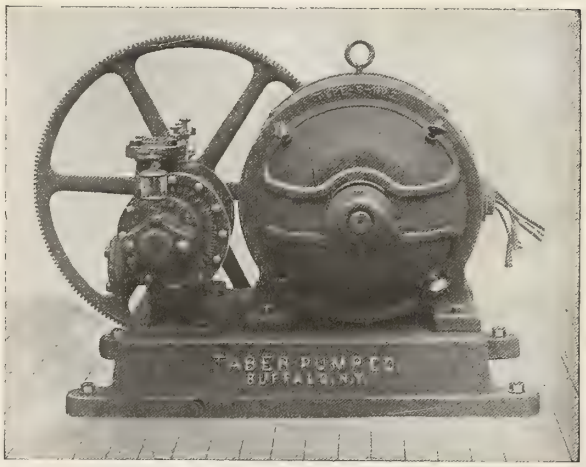
FACTORIES AND OFFICES:

MONTREAL—TORONTO—WINNIPEG

HEAD OFFICE: **MONTREAL**

W. A. JAMES,
AGENT,
VANCOUVER, B.C.

Our Best Motor Salesmen



Westinghouse Type S Motor Driving Taber Pump

Are the thousands of motors we have in daily service, each one a live exhibit of motor "quality."---Performance is more convincing than words.---You can find Westinghouse motors in operation everywhere. Ask the owners about their "quality."

Canadian Westinghouse Co., Limited.

General Office and Works: HAMILTON, ONT.

For particulars address nearest office

Traders Bank Building
Toronto

Hamilton

Sovereign Bank of Canada Bldg.
Montreal

152 Hastings Street
Vancouver

922-923 Union Bank Bldg.
Winnipeg

134 Granville Street
Halifax

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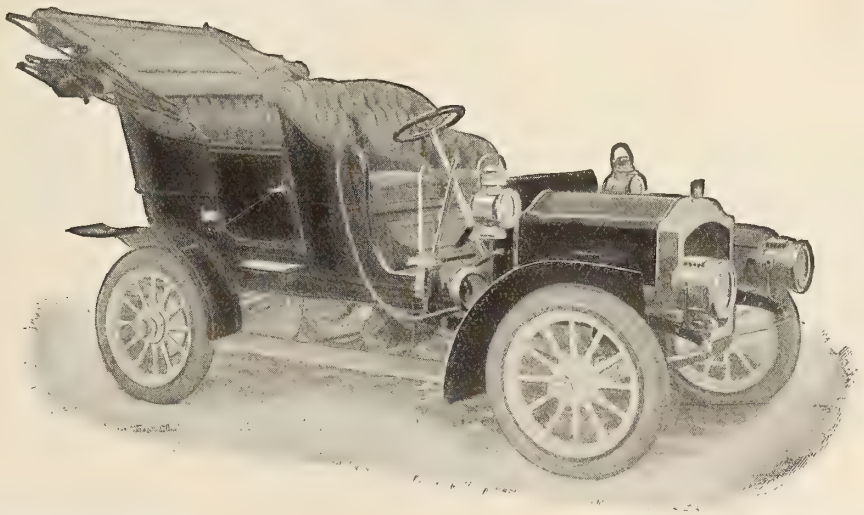
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1907 RUSSELL Models

THREE IN NUMBER

Each striving to outdo the other and each embodying the most popular and approved designs as displayed this year at the Great Shows in Paris and New York.



Designed for Canadian Conditions

Built to give Satisfaction

THE UP-TO-DATE FEATURES — **WE HAVE THEM IN ALL MODELS**

Metal to metal disc clutch. Selective sliding gear transmission. Nickel steel in all gears and shafts.
The most powerful braking system known.

MODEL D. 2 Cylinder 18 H.P. 90 inch wheel base. Tires 30 inch x 3½ inch $1,600.00
MODEL E. 4 Cylinder 25 H.P. 104 inch wheel base. Tires 32 inch x 4 inch $2,500.00
MODEL F. 4 Cylinder 40 H.P. 113 inch wheel base. Tires 34 inch x4 inch in front and 4½ inch in rear. Double ignition—accumulator and magneto—accomodation for 7 passengers..... $3,750.00

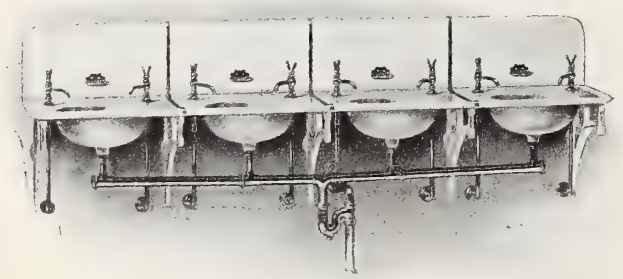
CANADA CYCLE & MOTOR CO., Limited **Toronto Junction, Canada**

Branches:—Winnipeg. Vancouver. Melbourne, Australia.

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MODERN LAVATORIES ARE NECESSARY TO COMPLETE THE EQUIPMENT OF YOUR OFFICE, WAREHOUSE OR FACTORY



Defective Sanitary arrangements may have cut deeply into the profits of your business. Have you ever stopped to consider the cost of delays and loss of trade occasioned by the ill health of employees? Anything that will ensure the health and add to the comfort of your workmen is as straight a business proposition as the installation of new machinery to reduce the cost of manufacture and increase the output.

STANDARD IDEAL lavatories, sinks and urinals provide perfect sanitation and are a guarantee of health.

STANDARD IDEAL WARE is beautiful in design and durable and finished in construction. The special process of enameling used gives a fine snowy opaque surface while at the same time the porcelain becomes as a part of the iron.

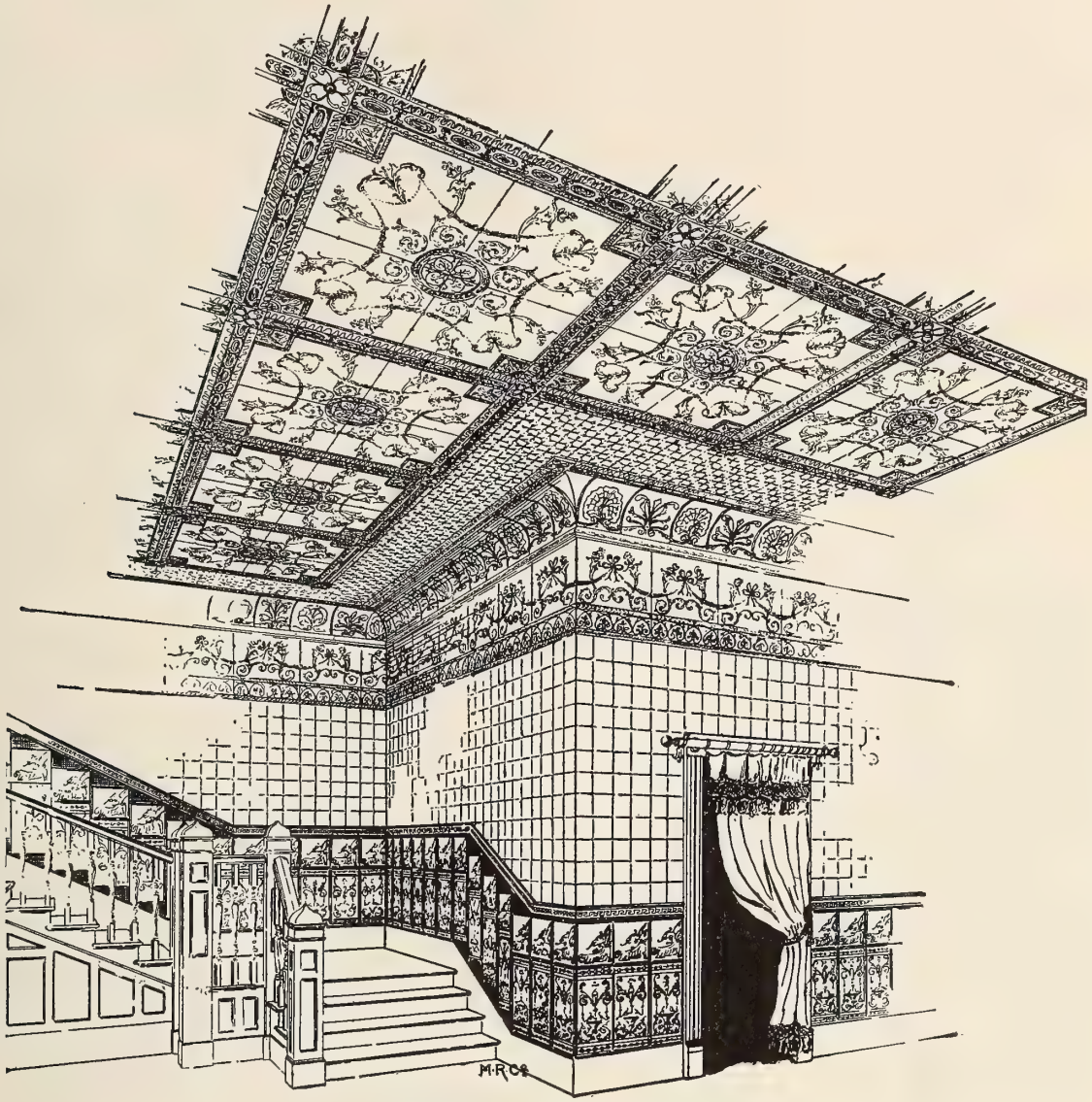
IF INTERESTED WRITE FOR CATALOGUE

THE STANDARD IDEAL COMPANY, LIMITED

PORT HOPE - - ONTARIO

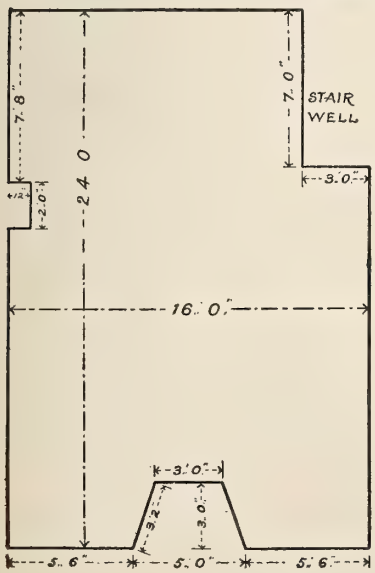
Sales Offices and Sample Rooms : 50 Colborne St., Toronto, Ont., and 128 Craig St., Montreal, Que.

METALLIC CEILINGS AND WALLS



Design No. 3508

The above illustration shows the ceiling and walls of a hall finished with our Interior Metallic Goods. We have hundreds of different designs and will be pleased to suggest suitable arrangements for each job.



WHEN ORDERING OR INQUIRING:—

State if ceiling is already sheeted with wood to receive metal.

Give ceiling (not floor) measurements for ceiling job.

If the ceiling is rectangular, without any obstructions, no sketch is necessary. Simply state size.

If the ceiling is irregular send sketch showing shape and size. See example in left hand lower corner.

Show sizes and locations of any beams and state if they are to be covered with metal.

THE METALLIC ROOFING CO.

OF CANADA, LIMITED

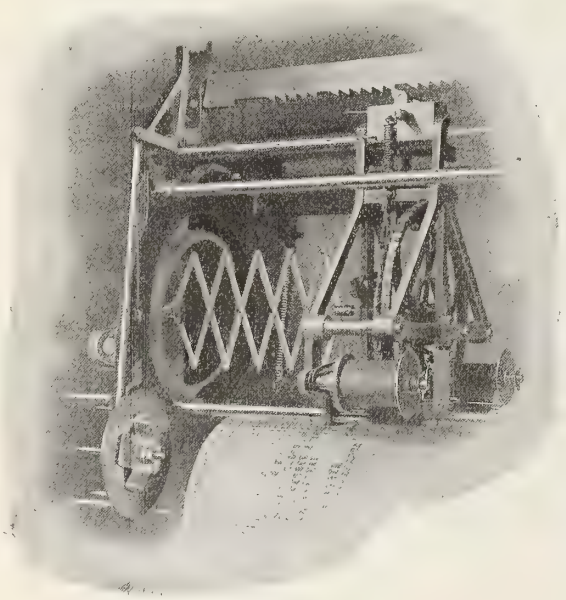
Manufacturers and Exporters

Toronto, Ont., and Winnipeg, Man., Canada

"GLOBE"

"IT PAYS TO KNOW, YOU KNOW TO PAY"

A time recorder that will automatically perform all the time-keeping, except the paying of the men, and gives a complete weekly pay-roll without copying.



Almost human—and much more accurate than any human time-keeper. They tell to a minute, and do it in black and white.
Our new catalogue now ready, ask for one.

UNIVERSAL SYSTEMS
LIMITED

8-10 Adelaide St. West
TORONTO, ONT.

14 Bank of Ottawa Building
MONTREAL, QUE.

Manitoba Agents: F. H. BRYDGES & SONS, WINNIPEG

TAKING INVENTORY

Our Inventory System allows stock to be taken in all Departments simultaneously. Any desired number of clerks may be put on the work of pricing, extending, etc. The record collated when complete and filed on Permanent Binder.

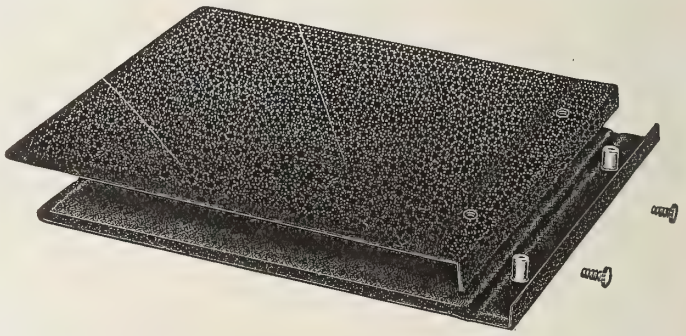
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1000 Inventory Sheets
1 Binder
3 Holders

$10.85

NOW IS THE TIME TO ORDER

Perpetuity Catalogues



The latest designs and information concerning loose leaf catalogues.
We are prepared to handle your catalogue complete from start to finish.
We have an interesting plan, write us now about it.

UNIVERSAL SYSTEMS
LIMITED

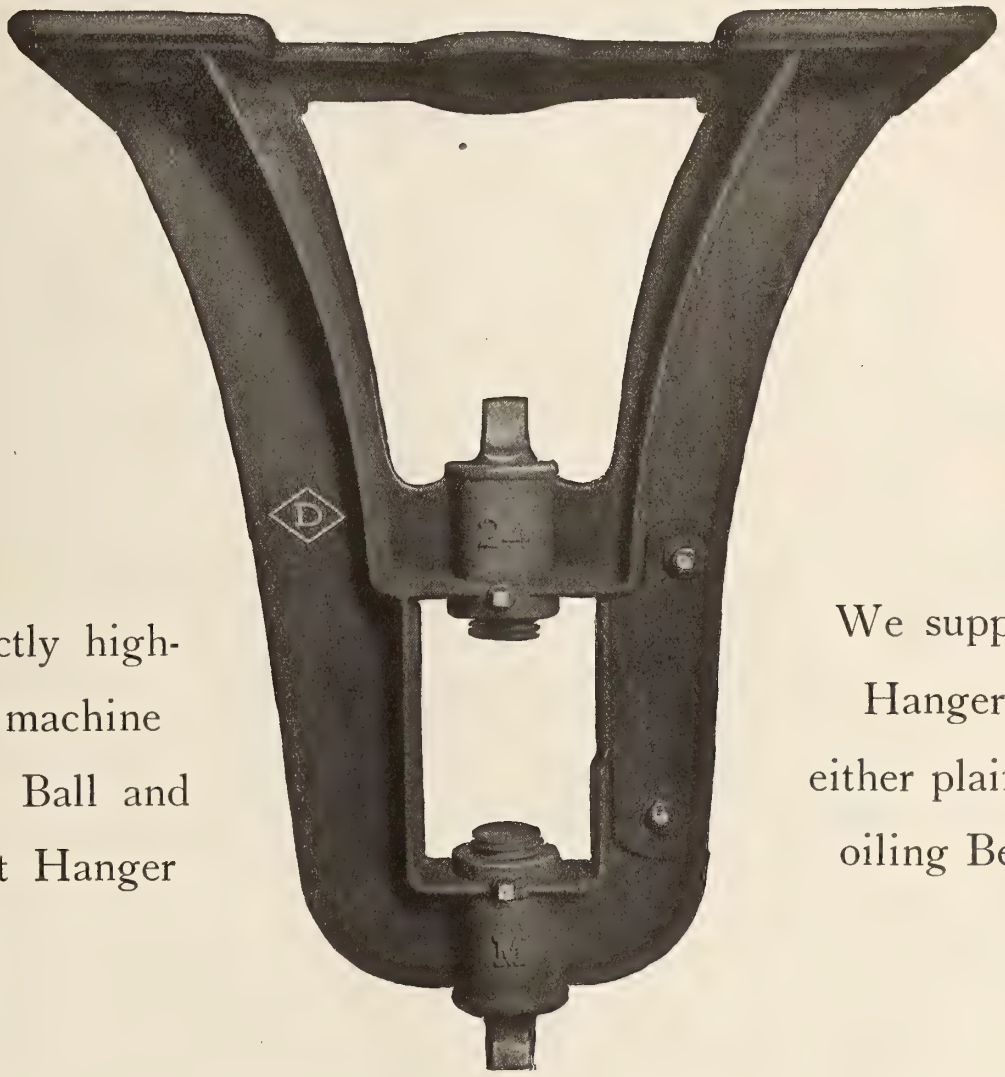
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MONTREAL, QUE.

HANGERS!

DODGE

Ball and Socket Drop and Post Hangers



A strictly high-grade machine molded Ball and Socket Hanger

We supply this Hanger with either plain or self-oiling Bearings

Our increased facilities and immense stocks enable us to make immediate shipments from stock, any quantity, any size.

DODGE MANUFACTURING COMPANY

TORONTO - - MONTREAL

MANUFACTURERS - WHOLESALERS - JOBBERS

HERE YOU ARE !

PORTAGE LA PRAIRIE, Manitoba

TO MANUFACTURERS, WHOLESALERS AND JOBBERS WISHING TO SHARE IN THE WONDERFUL PROSPERITY OF THE GREAT CANADIAN, AND LAST WEST; TO THOSE WHO WISH TO LOCATE WHERE THE BENEFITS PROVE GREATEST BY LESSENED EXPENSE AND AS GOOD RAILWAY FACILITIES AS ANYWHERE IN THE DOMINION OF CANADA, YOU MUST COME HERE ! ::

PORTAGE LA PRAIRIE is a beautiful little City of 6,000 population and growing rapidly, just 56 miles west of **Winnipeg**, on the **Main Line** of three great Railroad systems that touch **Winnipeg** and **all** points throughout the **Canadian West and North-West to Prince Albert, Alberta; Prince Rupert and Vancouver, B.C.**

PORTAGE LA PRAIRIE is the junction for the main lines of the **Grand Trunk Pacific** and the **Midland** Branch of the **Great Northern** from St. Paul and Minneapolis, **all Great Trans-Continental Railroads** that intersect and radiate, making **Portage La Prairie** the **Keystone** of the shipping and distributing situation over a vast territory where the demand for every sort of manufactured article is increasing daily.

PORTAGE LA PRAIRIE is only 56 miles from **Winnipeg**, with excellent train service. Manufacturers, Wholesalers and Jobbers located here, enjoy the privilege of **Winnipeg** markets, without the increased expense of that city.

PORTAGE LA PRAIRIE is an **Independent Port** of entry.

PORTAGE LA PRAIRIE offers every inducement to Manufacturer, Wholesaler and Jobber, situated as it is, close to **Markets** for every known commodity, with shipping facilities unexcelled, with many available, convenient and cheap sites, where current and ordinary expenses are lower than anywhere in Western Canada.

PORTAGE LA PRAIRIE has **never** experienced **Fuel Famine nor Labor Trouble,** nor has Portage Plains, which surrounds the City, ever suffered from **Crop** failure.

PORTAGE LA PRAIRIE has every convenience of larger cities; all modern improvements; and it is well-known that Portage La Prairie is the prettiest, healthiest, and least expensive **Residential City** in **all** of this great **West.**

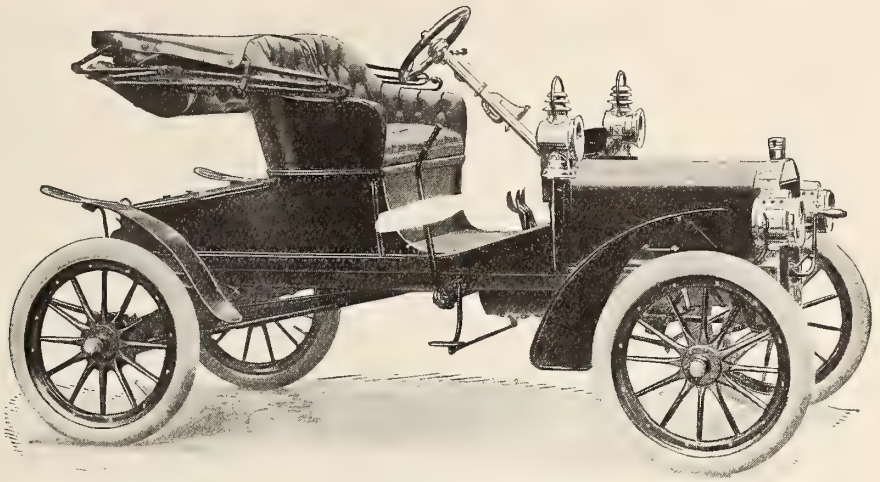
If you are a Manufacturer, Wholesaler, or Jobber, and think of coming West—you cannot afford to ignore us.

For further information communicate Q U I C K with :

H. W. BAKER, Secretary Twenty Thousand Club and Board of Trade

PORTAGE LA PRAIRIE - MANITOBA

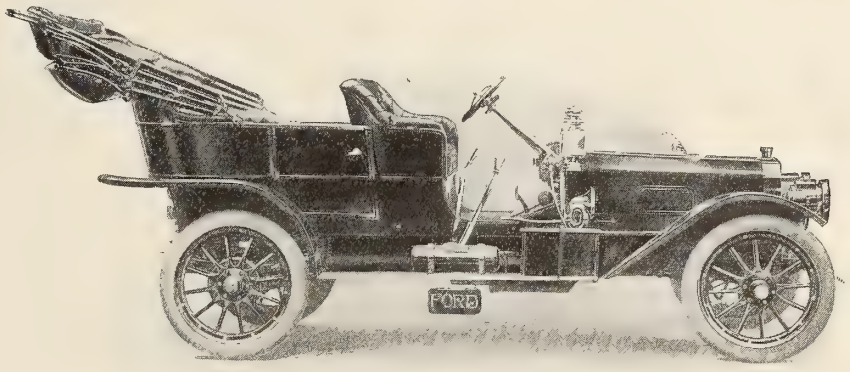
FORD CARS



MODEL N.—4 CYLINDER RUNABOUT.—$750.00.

Vertical Motor, water cooled, developing full 15 H.P. Planetary transmission with direct drive. Weight 1000 lbs. Equipment includes three inch double tube tires, lamps, horn and tools.

The Ford Model N is the result of the greatest manufacturing enterprise of the century. Only by building immense quantities is it possible to make such a car at such a price. No other car of its weight has so much power. No other car can compare with it in speed, endurance, flexibility, or the quality of material used in its construction.



MODEL K.—6 CYLINDER TOURING CAR.—$3,500.00.

Six cylinder, vertical, water cooled engine, developing full 40 H.P. Tires 34 in. x 4 in. Wheel base 120 in. Speed from a walk to 60 miles an hour on the throttle with full load of seven people.

Model K is a luxurious touring car with a world of reserve power, with speed to meet every requirement, with an engine so simple, so smooth in its operation, that the presence of a motor on the car could almost be questioned. A car that is the growth of a lifetime of study and practical development in automobile construction.

Write us for catalog and any additional information you wish about these cars.

FORD MOTOR CO. OF CANADA, Ltd.

WALKERVILLE, = = = = ONTARIO.

MANUFACTURERS' OPPORTUNITY

The Banking and Building Investments of WINNIPEG are
A SOUND GUARANTEE TO MANUFACTURERS

Bank clearings in 1906 totalled $504,585,914 (an increase over 1905 of 36.42 per cent.) New Buildings erected 1906 to the value of $12,760,450.

THE FOUNDATION OF A GREAT INDUSTRIAL CENTRE
is now fairly laid in Winnipeg

A 12 year flat valuation on assessment for manufacturers.
A Hydro-electric Municipal Power Plant under way which will guarantee power to manufacturers at a minimum cost.

FOR FULL PARTICULARS, ADDRESS :
CHAS. F. ROLAND, Industrial Commissioner, Winnipeg Development and Industrial Bureau
WINNIPEG - - - CANADA

15 x 34 inch Wheelock Engine

SECOND-HAND—IN GOOD ORDER

Complete with fly wheel 11 feet in diameter, steel crosshead, automatic lubricating pump, two extra pillow blocks and one wall box. Additional shaft 12 feet long, coupled to end of crank shaft, 4¾ inch diameter. Pulley 15 inch face, 5 feet in diameter.

Included with engine is exhaust steam head, oil separator and Webster's Patent Heater.

FOR FURTHER PARTICULARS AND PRICE WRITE

THE JOHN BERTRAM & SONS COMPANY, LIMITED

DUNDAS, ONTARIO, CANADA

The American Appraisal Co.

MILWAUKEE - WISCONSIN

JOHN E. BEGGS, General Manager.

THE COMMERCIAL DISTILLING COMPANY

DISTILLERS OF PURE GRAIN
SPIRITS, ALCOHOL, WHISKEY AND GIN

TERRE HAUTE, IND.,

January 16, 1907.

The American Appraisal Co.,
Milwaukee, Wis.

Gentlemen:-

We hand you herein our check for your invoice of the 5th inst., being to cover cost of appraisal as per contract.

We are very much pleased with the work and would not have done without it so long had we known the satisfaction we would get from it. You have assisted us to materially reduce our insurance rate, through making items specific, which have heretofore been blanket. We no not regret the expenditures at all and we will be pleased to answer any enquiries addressed to us regarding the merit of your appraisal.

Yours truly,
THE COMMERCIAL DISTILLING COMPANY,
JOHN E. BEGGS,
General Manager.

CANADIAN BRANCH: - 34 YONGE ST., TORONTO

Time Saved is All Profit.

BUSINESS SYSTEMS LIMITED
SYSTEM THE SECRET OF SUCCESS
TORONTO.

Business Systems will cut the book-keeping of any business in half.

Business Systems are proportionately as economical for a corner store as for the largest wholesale house.

■ ■ ■ ■ ■ ■

Our Monthly Account System posts your books and makes out your customer's accounts with one and the same movement of your pen.

Our Monthly Account System leaves nothing to change or recopy and prevents the possibility of anything being forgotten.

■ ■ ■ ■ ■ ■

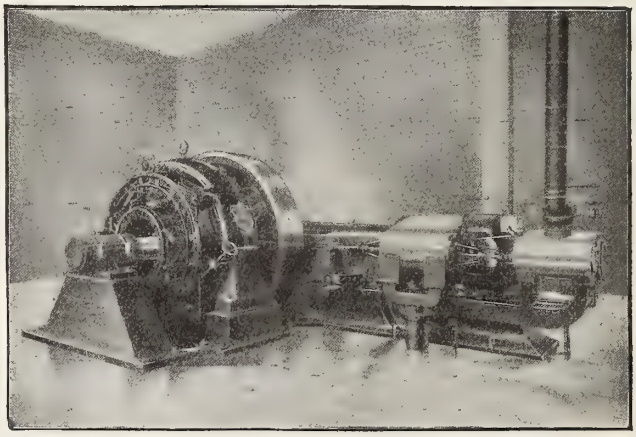
Will you let us tell you more about this in detail?

Write us for full particulars.

It does not obligate you to buy.

BUSINESS SYSTEMS
LIMITED
90 SPADINA AVE.
TORONTO, CANADA

SIDE CRANK IDEAL ENGINES



Specially adapted for Direct Connection. Perfection in High Speed Engine Design. Send for Bulletin No. 6.

THE GOLDIE & McCULLOCH CO., LIMITED
GALT, - - ONTARIO, - - CANADA

Western Branch: 248 McDERMOTT AVENUE, WINNIPEG, MAN.
QUEBEC AGENTS—ROSS & GREIG, MONTREAL, QUE.

WE MAKE Wheelock Engines, Corliss Engines, Ideal High Speed Engines, Boilers, Steam and Power Pumps, Flour Mill Machinery, Oatmeal Mill Machinery, Gyrators, Emery Choppers, Wood Working Machinery, Shingle Machinery, Heading and Stave Machinery, Wood Rim Split Pulleys, Iron Pulleys, Shafting, Hangers, Friction Clutch Couplings Friction Clutch Pulleys, Safes, Vaults and Vault Doors. **Send for Catalogue and Prices.**

WHEN YOU NEED MORE ROOM



You can't wait for a brick or stone building. It would cost too much, anyway. You want a **strong, warm** and **fireproof** structure, which can be **erected quickly,** and at **small cost.** Nothing will suit you better than

"ACORN QUALITY" CORRUGATED GALVANIZED SHEETS

They cost no more than an all-wood building. No sheeting boards are required, and **unskilled labor** can apply the metal on roof and sides.

This construction is **fire-proof, lightning-proof** and **water-proof.** It keeps out the wind, and simplifies the **heating problem.** Will easily last half a century without attention.

A SAMPLE OF OUR TESTIMONIALS FROM MANUFACTURERS

BERLIN ONT., Jan. 26, 1907

DEAR SIR,

We are pleased to state that the Corrugated Galvanized Iron, as also the Metal Siding, we received from you during the last few years, is givingu s very good satisfaction.

Yours truly,
THE BREITHAUPT LEATHER CO., LIMITED

WRITE US FOR QUOTATIONS

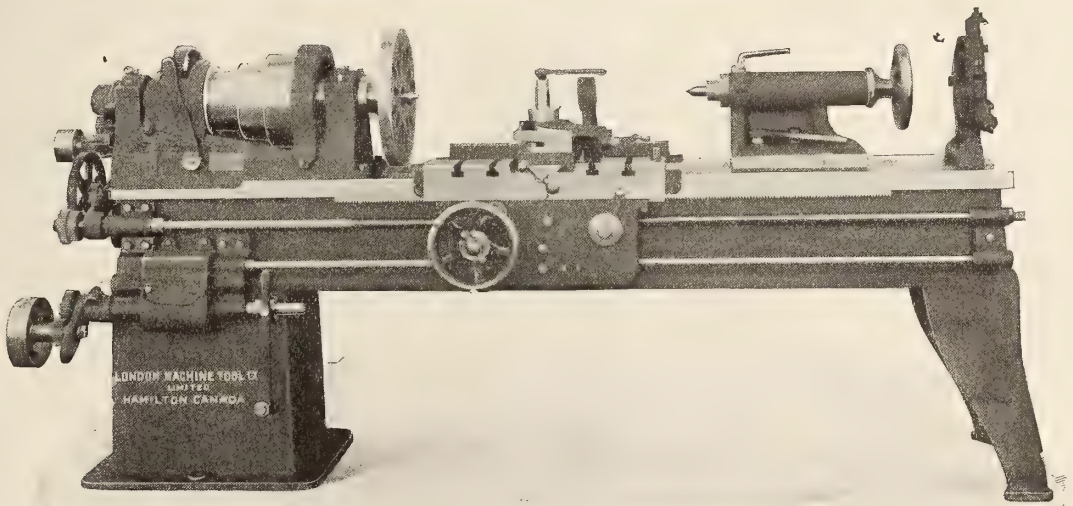
THE METAL SHINGLE & SIDING COMPANY, Limited

PRESTON - ONTARIO

MONTREAL	ST. JOHN, N.B.	QUEBEC	WINNIPEG	CALGARY
St. Catherine & Delorimier	Emerson & Fisher	J. A. Bernard	Clare & Brockest	Ellis & Grogon

LONDON MACHINE TOOL CO., Ltd.

HAMILTON - CANADA



This new type Lathe is esigned to successfully withstand all strain through use of HIGH SPEED STEEL. Lathe has four changes of feed obtained instantly by simply throwing over lever n front of Machine. CARRIAGE is very powerful with long bearing on ways. CONE has three steps for 3 in. Belt.

WRITE FOR FURTHER PARTICULARS

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(CANADA'S NATIONAL NEWSPAPER)

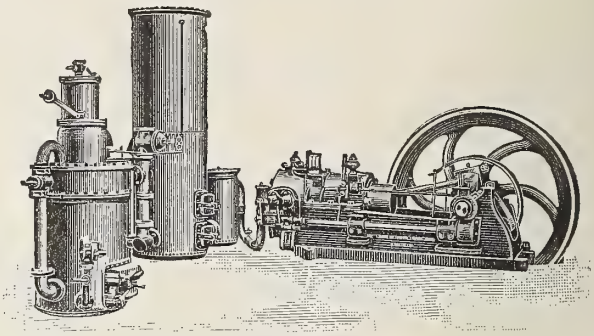
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PRODUCER GAS



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WRITE US { We are specialists and shall be happy to give advice.

The Producer Gas Co.

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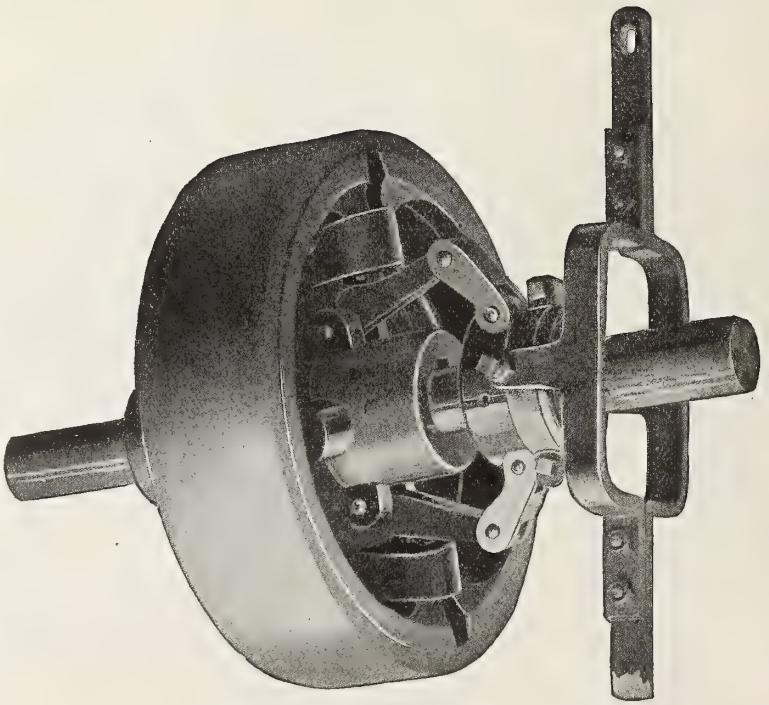
THE CLARKE FRICTION CLUTCH

HAS A LARGER FRICTIONAL SURFACE THAN ANY OTHER CLUTCH OF ITS SIZE

IS BUILT ENTIRELY OF IRON AND STEEL

IS NOT EFFECTED BY WHIRLING ACTION OF TOGGLES

BUILT IN SIZES FROM 3 TO 500 H.P.



NO WEAR OF CLUTCH WHEN RUNNING IDLE OR ENGAGED

NO WOODEN FRICTIONAL SURFACES TO BURN OR WEAR

UNIFORM PRESSURE OVER ENTIRE FRICTIONAL SURFACE

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Industrial Canada.

ISSUED BY

The Canadian Manufacturers' Association,

Incorporated.

"There be three things which make a nation great and prosperous: A fertile soil, busy workshops, and easy conveyance for man and goods from place to place."—Bacon.

Vol. VII. TORONTO, MARCH, 1907. No. 8

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercia prosperity of Canada.

COMMITTEE.

GEO. BRIGDEN (Chairman).

S. R. HART. C. R. MCCULLOUGH. S. M. WICKETT.
R. A. DONALD. J. M. SINCLAIR. J. J. MCGILL.
AND THE GENERAL OFFICERS OF THE ASSOCIATION (Ex-officio).

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General Secretary: G. M. MURRAY.
Editor: F. P. MEGAN.
Advertising Manager: B. L. ANDERSON.

BRITISH POSTAL RATES ON MAGAZINES.

MR. J. F. Ellis and Mr. J. A. Cooper discussed Imperial postal matters before the Empire and the Canadian Clubs of Toronto at recent meetings. Mr. Cooper developed the subject along the two lines of British connection and trade influences. The British Government charge a rate of $160 a ton for magazines. The same can be imported by express for $40. Thus it will be seen that this branch of the Postoffice business is transacted at a large profit.

The situation has worked out in a peculiar manner. Newsdealers in the United States got the domestic rate, or one cent a pound, for this class of papers. They thus had an advantage of 7 cents a pound over the British publishers. The result has been that they have captured the Canadian market with United States publications and American ediions of English magazines. In the latter the strictly British articles are replaced by matter which happens to be of interest to citizens of the United States, and American advertisements are substituted for English ones. As a consequence we are more familiar with the lesser officials of the United States than we are with the Prime Minister of Great Britain.

From a trade standpoint the objections to present regulations are clear cut. United States manufacturers are sending their advertising matter over the length and breadth of this country at a postal rate which they could not get for their own personal literature. Because of the postal advantages, the United States magazines, and hence the United States advertisements, are circulated here to the practical exclusion of British magazines and advertisements. It is easy to see the result of this in the swelling imports of American goods.

Mr. Ellis, who was no less insistent in his assertion that a lowering of the British rate must come, pointed out the fact that the Post Office Department in Great Britain was a recognized revenue producer. Yet the revenue which the Department would lose by lowering the rate, would be made up to the country many times over by the increased volume of business which would follow. Mr. Ellis referred to the resolution which he had introduced at the convention of Chambers of Commerce in England last summer, and he felt that the hearty approval with which it was received by all the business interests would find expresion in a reduction in the rates before long. A freer circulation in Canada of British periodicals is sincerely to be desired.

PRESERVE OUR TIMBER SUPPLY.

THE report of the Canadian Forestry Association's meeting held in Ottawa last January, has just been issued. Even a cursory glance through its pages compels the reader's attention to the urgent need of preserving our timber wealth. Immense as are the present supplies in Canada the demand from all over the world is more immense. This demand is growing, too, with startling rapidity as the sources of supply in the older countries are swiftly becoming denuded. Every day finds some new use for wood and apart from the beneficial effect standing timber has on the climate and waterfall, as a raw material for the industries of the world it is an absolute essential.

Reforestration was the watchword of the convention. It should be the watchword of the country from now on. There is no subject which calls for quicker and stronger action than this. For generations we have displayed the utmost prodigality with our timber. When the comparatively few forests which remain standing in the United States disappear, and Canada is called upon to supply lumber for the whole continent, our permanent supplies will be of small account unless planting and seeding are carried out on a large and comprehensive plan.

There are two great uses for cut lumber; for building and manufacturing, and for turning into paper. Both demands have been on the increase, but pulp paper has become so necessary that enormous quantities of wood have been used of late. It is estimated that if the paper mills of the United States drew on their own supplies exclusively they would use up all the wood in the United States in seven years. With such constant drafts on the natural supply it is not surprising that fear for the future supply of such an important commodity has at last been engendered in this country.

The two conventions which have been held have drawn public attention to the matter. However, conventions in themselves cannot accomplish much unless the work outlined at them is carried on actively. One year ago the need for replanting denuded areas was strongly set forth by all the leading students of the question in Canada. Again in British Columbia in September the ground was covered thoroughly by excellent addresses. Having thus educated the public up to the need for a change in methods, the further step becomes necessary of compelling those who are cutting timber to make some provision for the future supply. There are few more urgent questions in Canada to-day.

BUY GOODS MADE AT HOME.

THE people of Hamilton recently held a "home manufacturers" week, during which the merchants made special displays of articles made in Hamilton. All reports coincide in stating that the idea was worked with excellent results. This is the great principle in a limited field which the Canadian Manufacturers' Association have been striving for in a national sphere. The education of Canadians to use Made-in-Canada goods has been going on now for years. The reasons which made it advisable and advantageous to encourage civic industries are the same as those put forth for the encouragement of national industries.

Self interest, apart altogether from sentiment, should impel citizens of Canada to buy, as far as possible, goods manufactured at home. Every dollar's worth of goods manufactured here means so many cents paid to workmen, who will be buying food and clothing, erecting houses, etc., and generally adding to the trade of Canada. Every dollar's worth of goods manufactured here represents so many cents spent in the development of natural resources, of the farm or the mine or the forest. The development of natural resources means the employment of workmen whose money is spent in Canada. Thus money is kept in circulation in Canada to the benefit of the whole nation. The manufacturer sells his goods, and with the money received he pays his workmen and increases his plant or invests in other industries. The workmen buy from the merchant, who is in turn enabled to increase his business and buy more manufactures. Thus the circle is followed. Like the waves from a stone thrown in a pond, each circle is of a greater radius. So as the trade within the country passes from one to another the number benefitted is each time increased. More manufactures mean more mechanics, more mechanics mean more men to handle the retail trade and hence in turn more manufactures. Each increase means a greater number engaged in the development of mines and forests, in transportation and in financial enterprises. And every one of these means an additional consumer of the farmer's produce.

Thus upon our buying at home depends to a large extent the prosperity of the country. Do we think of that when we are making our purchases? It no longer requires a sacrifice to insist on Canadian made goods. Year by year the range of articles made in our own country has widened. The quality has at the same time improved, till now we need fear competition on that side with none.

The Made-in-Canada idea is a good one to keep to the front. It shows confidence in our own products. As will be seen on another page of "Industrial Canada," it is a prominent feature of our exhibit at the New Zealand International Exhibition. Each individual will feel the prosperity which will result to the whole country if we unite in buying Made-in-Canada goods.

THE PENALTY OF EXPANSION.

THE whole country has suffered of recent years from the abnormal extension of railroad lines. The mileage has increased, both in the old established Provinces and in the West, at an enormous rate. Such extensions have always been made as a result of increased offerings of freight. Unfortunately there has been no adequate addition to the rolling stock to supplement the greater facilities in trackage and to accommodate the increased freight resulting from the opening up of new districts and the development of business along old lines.

A disastrous failure to meet the demands has been especially noticeable this winter. While the fine weather of autumn lasted and every advantage rested with the railway companies for moving their cars to the best advantage, they were found woefully wanting in handling the crops. Shippers in Ontario and the East were met with the statement that all available equipment was being used in moving the grain of Western Canada. Yet the farmers of the West were all the time suffering the greatest hardships through being unable to get cars. A large percentage of last year's crop is still in the farmers' barns or piled up in the fields. Thus, even when the Eastern division is starved to the utmost the West was far from being satisfied.

The railways place the blame on the car and locomotive manufacturers. They aver that they are ready to spend millions of dollars at once if the companies can turn out the rolling stock for them.. Even if their statements about the car companies working to their utmost capacity be true, yet they do not escape responsibility by that. The present condition is no new thing. For years there has been the same shortage. The intensity of the trouble now results from the accumulation of years.

The recent pronouncement of Judge Killam, the chairman of the Board of Railway Commissioners, that he would not in future agree to the building of any more branch lines until additional rolling stock was provided, establishes a correct principle. With every mile of new track laid there should be a corresponding amount of new cars and locomotives provided. The inability of the companies to move what cars they have in the West, and their failure to provide for the harvest which they had every reason to expect, have tied up capital which was urgently needed. The fuel famine is in no small measure attributable to the railway companies. They have utterly failed to give the service which the public have a right to expect. The Board of Railway Commisioners will do well to insist on increased cars and locomotives.

WORKINGMEN'S HOUSES.

THE Toronto Branch of the Canadian Manufacturers' Association, at a dinner held on the evening of Feb. 21, gave an opportunity for a full discussion of the working men's house proposition. The scheme, as explained in detail by Mr. Roden and Mr. Thorne, is the result of a care-

ful investigation of housing conditions and an accurate estimate of the cost of building. It is based on the undoubted scarcity of houses of a moderate price, such as would be suitable for workmen. This condition is not confined to any one city. It is a common complaint in all industrial centres in Canada. Hence the work of the manufacturers of Toronto, who have given largely of their time and energy in seeking an adequate solution of the problem, will be of general benefit to all industrial communities.

The points which were especially emphasized by Mr. Roden in his discussion of the problem at the dinner, and in his treatment of the same subject in the present issue of "Industrial Canada," are the need of relieving the present congestion of the population, and of formulating some plan whereby workmen may become the owners, in time, of the houses they occupy. Of these the first refers largely to the general effect on the health and morality of the public, of unsanitary and over-crowded living quarters. That the moral and physical well-being of workmen has a direct and strong influence on their work goes without saying. The second affects the relationship of employer to employee and should ensure a permanent staff of satisfied workmen. It will eliminate to a large extent the roving tendency which is generally found where a workman has no ties binding him to one location.

The large number who turned out to hear the discussion was ample proof of the interest which has been aroused in the subject. No doubt the promise of tangible support by some of the speakers was especially welcomed by the men who have given so freely of their time in collecting the necessary data and doing the preliminary work of investigation.

The manufacturers of Toronto have now a clear cut proposition before them. The scheme is an imposing one, yet it is one which can be handled if it is given good support. Several have already taken five thousand dollar shares in the company. It just requires two hundred of these to make up the entire subscription. The success of the undertaking depends now on the financial interest of manufacturers.

WITHDRAWAL OF WATER AT NIAGARA.

ACTION has been taken by the United States Government to prevent the withdrawal of water from the upper river to such an extent as will seriously affect the scenic beauty of Niagara Falls. When the companies first began construction work and before accurate measurements of the flow of water had been made the public were much perturbed over the possible desecration of this great natural beauty spot. Subsequent investigations went to show that these fears were to a large extent without real foundation. However, to prevent any possibility of permanent damage, Secretary Taft has issued regulations setting forth specifically the amount of water which may be withdrawn from the river on the American side, and the amount of electricity, representing a certain amount of water taken from the Canadian side, that can be imported from Canada. The two American companies are allowed to take 15,100 cubic feet per second. Power generated on the Canadian side may be imported in the following amounts:—Ontario Power Company, 60,000 horse-power; Canadian Niagara Power Company, 52,500 horse-power; the Electrical Development Company, 46,000 horse-power; the International Railway Company, 1,500 horse-power. This is a total of 160,000 horse-power, representing a flow of water of 12,000 cubic feet per second. Thus the maximum amount of water which can be used for generating electric power for use on the American side is 27,100 cubic feet per second. However, it is unlikely that over 5,000 cubic feet will be drawn off on the Canadian side for export power for the present, so that about 20,000 feet will be about the total during the next three years, which is the time for which permits have been issued. The volume of water passing over the Falls is approximately 220,000 cubic feet per second.

From these figures it will be evident that there is no immediate danger of the Falls being impaired. Even allowing for the most liberal use of power in Ontario the total will not represent an amount equal to that provided for in the United States. Hence a flow of at least 180,000 cubic feet of water per second is assured. This will preserve the scenic qualities of the Falls, and yet admit of a large industrial development.

PROTECTIVE TARIFFS AND INDUSTRIAL EFFICIENCY.

A PROMINENT woolen manufacturer, commenting on the new tariff, recently remarked to the Association that the only hope now left for his industry, if indeed there was a hope, lay in Technical Education. This remark is significant, in that it calls to mind one phase of the "Canada for the Canadians" policy which, unfortunately, is only too often overlooked.

No scheme of industrial development can be said to be truly national in character which limits itself simply to the problem of reserving the home market for the home producer by means of a protective tariff. Such a policy may encourage the establishment of factories to turn out everything that can profitably be made in the country, but unless it goes further it falls far short of accomplishing what should be the real object of all protection. Protection is not in itself the be-all and end-all of a national policy, but only the means to an end. It is but the first step towards the goal of sound economic production, wherein producer and consumer share equal benefits.

By far the most important of the intervening steps is industrial training. This training, or Technical Education as it is sometimes called, may be described as the domestic side of the tariff. The tariff is a nation's foreign industrial policy, in that it practically dictates the amount of foreign-made goods that shall be allowed to enter. By so doing it ensures from the start a market for the home producer, and living wages for his employees. Technical Education is a nation's domestic industrial policy, in that it improves the efficiency of its working men and makes for economy of production. By so doing it provides the consumer with an article equal in quality and value to anything that can be purchased anywhere, while at the same time it enables the artisan to obtain a remuneration commensurate with his ability.

Another point to be borne in mind is that, as industrial efficiency increases, the need for protection decreases. This is true to a more marked degree of some industries than of others. Those that require to import their raw materials will always need protection, but generally speaking the industry which utilizes materials indigenous to the country will be able gradually to dispense with protection as the efficiency of its working men and its equipment approaches the level of the efficiency of the working men and equipment employed by the same industry in other countries. If the remark of the woolen manufacturer is correct, it would almost seem that, in some industries at least, success may be achieved even without adequate protection, provided facilities are given the

workers to perfect themselves in all the practical and theoretical branches of their trade. We mention this case not as indicating that if technical schools were provided in sufficient number and variety the policy of a protective tariff could be abandoned—that would be as unwise as it is unnecessary—but rather as illustrating the important part played by industrial training in national industrial development.

The ideal arrangement, of course, is where protection and technical education go hand in hand, each contributing to the upbuilding of the country and promoting the prosperity and contentment among all classes. Protection we now have, in some measure at least, even though it may still be inadequate, and it needs no pointing out that the Statesman who supplements it by laying broad and deep the foundation of a national system of technical education will earn for himself the lasting gratitude of all his fellow-Canadians.

BUILD SHIPS IN CANADA.

CANADA'S ship-building industry has suffered a severe depression since the time when, thirty years ago, she stood forth among the ship-owning nations of the world. The drop to eleventh place has been accompanied by stagnation in the old ship-yard towns of the Maritime Provinces. Some building is still continued there, and in the Great Lake ports, but its total volume is insignificant compared to the tonnage which annually plies in our waters.

We are making great efforts to improve our waterway system. Much money is being spent on harbors and canals. All these improvements are taken advantage of by the ship-owning nations of the world. From the ships themselves we receive no advantage. While many of the constituent parts are subject to duty, the ship complete is admitted without impost.

In other words the shipbuilders of this country are paying duty on their raw materials and receive no protection against foreign builders who have the advantage of cheaper materials and cheaper labor. The taxing of ships is impracticable. The only feasible way to establish a strong ship-building industry in Canada is by giving builders a bonus to offset the disabilities from which they are suffering.

In the case of Canada there is a strong connection between an adequate merchant marine and the granting of a preference only to goods coming through a Canadian port. The latter has been urged on the Government with especial force of late. The reply is understood to have been that it would come when transportation facilities would warrant it. This is almost equivalent to saying when Canada can command enough ships to handle the trade.

The statement of the case, presenting the claims to the Government for a subsidy for steel ship-building, was closed with the following paragraph:

"Canada possesses extensive coal deposits at tide water which afford a marine traffic of over four millions of tons; she ships a million thousand feet of lumber products annually; her export of grain, rapidly increasing, will soon reach a hundred millions of bushels. Of other products Canada has hundreds of thousands of tons to export. In addition to providing this enormous trade for a shipping business Canada has excavated canals, deepened rivers, dredged harbors, erected docks, buoyed and lit the entrance to all our waterways, and, in short, created the business, the facilities and conditions demanded by a maritime power, and then stopped short without taking one effectve step to bring into being the thing itself—a mercantile marine."

EDITORIAL NOTES.

The Province of Nova Scotia has made a forward move in the Technical Education Bill, which has just been submitted to the Legislature. The scheme provides for: First, a central school of university grade at Halifax; secondly, secondary schools in several industrial centres; thirdly, the transference of existing mining schools to the control of the director of technology, who is to be principal of the college and head of the whole system. He will be responsible to the Council of Public Instruction.

A good-roads agitation, which cannot but be productive of good, has been started by "The Farmer's Advocate." A series of prizes are offered for the best results from the use of the split-log drag. The competition will last during the coming season, and the results will be judged by Mr. A. W. Campbell, Good Roads Commissioner.

Much interest is being taken in the shipping bill which is now before the United States House of Congress. The people of that country have become thoroughly alive to the necessity of an adequate marine transportation service. Subventions, under the pending act, will be granted for steamship services to Brazil, Argentine, Panama, Peru and Chile, the Orient via Hawaii, the Orient direct and Australasia. It is estimated that the vessels which will have to be built to supply this service will require the expenditure of $32,000,000.

In every case the two questions of an adequate marine and a strong ship-building industry go hand in hand. No country can secure efficient service unless it can build its own ships. Canada is giving attention to the development of a truly Canadian shipping. Other countries are now doing the most, even of our coasting trade. The assurance of Mr. Fielding, that the matter of increasing our own tonnage was receiving the consideration of the Government, gives grounds for hope that Canada will not fall behind the United States in questions of shipping.

A recent decision by the United States Board of Appraisers admits of the importation of zinc ores into that country free of duty. This ruling is of considerable importance to Canada, since a large quantity of these ores is annually shipped from British Columbia to the smelters in the neighboring States. Last year the owners of the zinc ore mines in Missouri and other States persuaded the Treasury Department to levy a 20 per cent. duty on the ores under the paragraph in the law for metallic mineral substances. It was represented to the Government that ores were being brought in from Mexico, British Columbia and elsewhere at a low rate of duty, thereby competing in an injurious manner with the domestic product. On the other hand, the importing and smelting interests alleged an insufficient supply of the ore in the United States to keep the smelters in operation. The importers, therefore, requested that the ores be permitted to enter as in the past, paying duty at the rate of 1½ cents per pound on the lead actually contained in them. The Treasury Department at first acceded to the request of the mine owners, but an appeal was filed by the importers and their claims were allowed.

Fire Insurance Companies Accounts.

Misleading Statements Given to the Public.

AT this time of the year, in the due order of things, the accounts of the various Domestic Fire Insurance Companies, for the year ending 31st of December, 1906, are being submitted to the shareholders, and much space is being used in the daily press and in the trade papers to communicate the same to the general public.

It is to be presumed, of course, that the use of advertising space is for the purpose of demonstrating to the general public the advantages afforded by each particular company in the nature of the security it offers to its policyholders.

Statements to Government and Shareholders Differ.

Concurrently with the submission of the various annual accounts to the shareholders, another statement is being prepared to be deposited with the Superintendent of Insurance at Ottawa, if the company is licensed by the Dominion authorities, or, to the Inspector of Insurance at Toronto, if the company stands registered only with that Department. The statements to Ottawa or Toronto are made up in accordance with the provisions of the Act in that behalf and are therefore uniform and presumably show, in simple and accurate terms, the results of the year's business and the standing of the companies.

There is no law that compels the adoption of any particular form in which the companies' statements shall be rendered to the shareholders or to the public. There is, therefore, a very great difference between the appearance of the two statements that are being concurrently prepared in the same office. Is it unfair to assume that wherever this difference is apparent the statement issued to the shareholders and the public is manifestly designed to impress the people much more favourably than would the simple and accurate terms of the Government statement?

Reports Are Misleading.

That the companies may and do issue statements to the public untrammelled by any defined formula must cause a lack of uniformity which makes it almost impossible for an ordinary layman to appreciate intelligently the standing of the companies or to institute comparisons of any value—possibly this is not a hap-hazard condition but part of a well-ordered design and, if it is, it is well fulfilling its purpose.

How seldom does a manufacturer pause to think of the character and stability of the company with which he is insuring, and how few take the trouble to ascertain the surplus of the company over its liabilities. Indeed it is open to question if many of the insured really know what the surplus of an insurance company means, and how it is arrived at. Whoever fails to understand this point is quite certain to be befogged in any attempt to analyze the ordinary account, as it is submitted to shareholders and the public.

Have Escaped Criticism.

In last month's issue of "Industrial Canada," page 566, we took occasion to comment upon the disposition of "Fire Insurance Companies' Deposits," and from the enquiries that have followed that article it seems desirable that we should deal with the subject a little more fully in conjunction with the criticism we are now offering on the numerous misleading statements that are being freely issued to the public. Before proceeding with this line of thought we think it well to state that the press, whether the daily newspaper, the trade journal or the insurance and financial papers, consistently maintain the most stolid indifference to the conditions revealed by the statements they publish from time to time; fair and honest criticism should be welcomed at all times by everybody interested and the sounding of a warning note, when conditions justify it, should surely be a commendable and praiseworthy part of a critic's duty. How exceedingly rare is it to find a point of interrogation much less an open criticism on a published account of any company?

A Concrete Example.

And, further, how frequently an annual statement contains most fulsome and flattering encomiums and at the annual meetings directors talk the most utter balderdash about the great success of the enterprise, when in reality the concern is almost in the last stages of dissolution. While writing we have before us the published account of a certain fire insurance company, freely published in the daily press, which opens with a note of congratulation on the position which it has attained and on its past success. An examination of the financial statement that follows shows that this particular company has actually lost about 75 per cent. of its paid-up capital since its organization, and yet the president and general manager, who both sign it, see in that a source of congratulation!

What is the Test.

By what test then shall we judge the soundness of a fire insurance company? There is only one test, that is the actual net surplus after providing for all liabilities. From the shareholders' point of view the test should be the surplus after considering the paid-up capital as a liability; from the policyholders' point of view the paid-up capital may be regarded, though it is not prudent to do so, as an asset, although in the United States it is never so regarded.

What are the liabilities? First and foremost, the 'Reinsurance Reserve," that is the portion of the premium paid in advance which the company has not earned at the time the statement is made. Years of actual experience have demonstrated that from 70 per cent. to 75 per cent. of a year's premium income of a company established three or more years, and transacting an average general business should be set aside to cover this liability. A moment's reflection after again reading our last article, already herein referred to, will make this quite clear. If a company is not able to set aside this reserve the paid-up capital must make it good and consequently the capital stands that much impaired.

Another liability is, of course, losses unpaid at the time the books were closed, and yet again provision must be made for open accounts, constituting the third and the last item of fixed liabilities.

We can best serve the purpose of this article if we take a concrete case, and we shall not quote the name of the company lest we should be charged with an effort to prejudice them in the eyes of the public. This is not our desire; if by any chance this article comes under the eyes of the executive officers of the company they will recognize their own handiwork and will gather what a different view others take of the standing of their company.

The following is an exact copy of the statement of the company as published in "The Globe."

BALANCE SHEET, DECEMBER 31st, 1906.

Liabilities.

Capital stock (paid, $95,615.20)	$380,000 00
Re-Insurance premiums	1,102 37
Provision for reported fire losses	1,406 02
Re-Insurance reserve	63,710 86
	$446,219 25

Assets.

Capital stock liable to call	$284,384 80
Goad's plans	2,086 20
Office furniture and fittings	1,181 65
Balance due by agents	10,156 36
City of Toronto Sterling Debentures	36,499 99
City of Toronto Currency Debentures	7,500 00
Central Canada Debentures	2,500 00
Huron and Erie Debentures	5,933 34
National Trust Company, Limited	10,000 00
Deposit receipt Union Bank	66 67
Cash on deposit Union Bank and on hand	13,779 95
Profit and loss account	72,130 29
	$446,219 25

We shall recast this balance sheet as we think it should have been presented to the public and as it will be practically made to the Insurance Inspector of Ontario, in whose report it will duly appear.

REVISED BALANCE SHEET, DECEMBER 31st, 1906.

Liabilities.

Reinsurance reserve		$63,710 86
Provision for reported fire losses		1,406 02
Reinsurance premiums		1,102 37
Capital paid up	$95,615 20	
Less impairment	72,130 29	
		$23,484 91
		$89,704 16
Subscribed capital uncalled		$284,384 80

Assets.

City of Toronto Sterling Debentures	$36,499 99
City of Toronto Currency Debentures	7,500 00
Central Canada Debentures	2,500 00
Huron and Erie Debentures	5,933 34
National Trust Company, Limited, (cash?)	10,000 00
Deposit Receipt Union Bank	66 67
Cash on Deposit Union Bank and on hand	13,779 95
Balances due by agents	10,156 36
*Goad's plans, and office furniture and fittings	3,267 85
	$89,704 16

*This item is not regarded as an available asset by the Inspector of Insurance for Ontario.

Of course this company would rather not show its shareholders that so large a portion of its capital should be considered to be impaired, but the Government report will show it and why should not the statement to the shareholders and the public be made to correspond?

A Misleading Entry.

We cannot fairly criticise this account as presented to the public without drawing attention to the last item on the "Assets" side, viz., "Profit and loss account $72,130.29." Mark! This is on the assets side, and therefore there must be something to show for it. What is its worth as an asset? and what securities do the company hold for it? There must surely be some, for the auditors' certificate is attached. It will be noticed in the revised statement we have prepared that the impairment of capital is shown as $72,130.29, precisely the amount shown as an "Asset" in the profit and loss account. Would the average shareholder or policyholder recognize that the companies' profit and loss account shows a "loss" of $72,130.29, when the item appears on the assets side of the account?

We also notice in many of the companies' accounts that have been published there appears as an "Asset," good for 100 cents on the dollar, the capital stock liable to call. In the case of the company we have just referred to this amounts to $284,384.80. We must of course admit that this item is a collateral security and should be appreciated as such, but we protest against its being taken as an asset good for its face value, or treated in any other way than as the Government Report provides that it should be taken.

Reserves For Reinsurance.

Reverting for one moment to the article in last month's issue on the subject of Insurance Companies' Deposits, if Attorney-General Meyer's opinion as therein recorded is sound, then $63,710.86 of this company's funds are "earmarked" for the purpose of cancelling or reinsuring their policies in force, and their strength should be measured accordingly.

The question of the loss paying ability of a fire insurance company is an important one for insurers, particularly where the situation of the risk covered renders it probable, or even possible, to be involved with others in a large conflagration. Insurance companies' accounts should, therefore, be made clear and simple that the ordinary man may read as he runs, and we, therefore, offer no apology for dealing with the subject even although it has involved the use of a particular instance by way of concrete illustration. We may possibly take up the matter again in a subsequent issue, for the subject is by no means exhausted in the treatment now given to it.

Test of Electric Locomotives.

The Spokane & Inland Railway has been making some tests with its new electric locomotives recently received, with the following results, as expressed by an official of the railway: "The new electric locomotives have proved most satisfactory in every way. The locomotive complete consists of two sections, but the other day we put a load of 1,080 tons on one section and hauled it from Coeur d'Alene to Spokane. On the line there is a stretch of track on a 1 per cent. grade. The train consisted of 25 loaded cars, three empty ones and one dead steam engine. The run was made without a breakdown or any kind of a hitch whatever. This test is considered satisfactory, as one section is only guaranteed to haul seven cars of 60,000 pounds capacity up a 2 per cent. grade at a speed of eight miles an hour. The total engine of two sections weighs 100 tons and develops 1,200 horse-power. This engine will pull more than a 115-ton steam locomotive."

Canada's Exhibit at New Zealand.

The Canadian Court at the International Exhibition Meets With Great Commendation.

The New Zealand International Exhibition, now being held at Christchurch, New Zealand, is of much larger proportions than was ever anticipated, and the Government is well-pleased with the response made by Governments and firms, to the invitation to participate therein.

The site of the Exhibition is Hagley Park, Christchurch, and the ground contains an area of over 250 acres, while the buildings of the Exhibition cover an area of about 50 acres. Every inch of available space is occupied, and the general arrangement of exhibits and the accompanying decorations are fully equal to that of any of the large World's Fairs held in Europe or America.



The Musical Instrument Display—New Zealand International Exhibition.

The largest Court or Section in the Exhibition, is that occupied by Canada. It contains a floor-area of 17,000 square feet, while the surrounding walls afford a space of 5,000 square feet. These walls have been utilized to give a handsome effect to the Court, by a covering in red bunting and grain, giving a very attractive wall paper effect. This mural decoration is greatly admired, and is the only one of its kind in the building, and perhaps the first one ever seen in Australasia. The walls have been further utilized to carry pictures, charts, etc., all of which are proving a most interesting and educational feature of the Exhibit.

About three-quarters of the floor space is devoted to a display of articles manufactured in Canada, and a neat sign in green and gold is attached to each exhibit, impressing on the visitors the fact that the goods are "Made in Canada."

The following Canadian manufacturers are represented in the Canadian Court:—Canada Carriage Company; Wm. Gray & Sons; North American Bent Chair Company; National Table Company; The Canadian Rubber Company, of Montreal, Limited; C. Kloepfer; Peterborough Cereal Company; Victoria Wheel Works; Pacific Coast Pipe Company; The Dodge Manufacturing Company, Limited; P. R. Cummings Manufacturing Company; The Hamilton Cotton Company; Wm. A. Marsh & Company; The Imperial Organ Company; The Goderich Organ Company; The Sherlock Manning Organ Company; The Williams Piano Company; C. Richardson & Company; A. F. MacLaren, Imperial Cheese Company, Limited; Christie Brown & Company, Limited; The Canada Paper Company, Limited; The Montreal Rolling Mills, Limited; The E. B. Eddy Company, Limited; Taylor, Scott & Company; Hiram Walker & Sons; The Empire Typewriting Company; The Hewson Woolen Mills, Limited; Jas. Harrison & Sons; Abenakis Mineral Company; Dowswell Manufacturing Company; Berlin Rubber Company, Limited; R. MacDougall Company, Limited; Stauntons, Limited; The Raymond Manufacturing Company; The Noxon Company; Chestnut & Son; The Peterborough Canoe Company, Limited; E. T. Wright & Company; The Hamilton Incubator Company; The Maple Leaf Rubber Company, Limited; D. Maxwell & Company; Canada Cycle & Motor Company, Limited; The McClary Manufacturing Company; Truro Condensed Milk Company; Ingersoll Packing Company; Metallic Roofing Company, of Canada, Limited; The Waggoner Ladder Company; The Canada Furniture Manufacturers, Limited; Canadian Pacific Railway; Grand Trunk Railway; Imperial Oil Company; Canadian Salt Company; Hart Corundum Wheel Company, Limited.

The high standard and quality of the goods are favorably commented upon. The attractiveness of the Court, as well as the high class of the exhibits, will do much to improve our trade with New Zealand. The sympathy and

sentiment of New Zealanders is all towards Canada and the Mother-Land, to the exclusion of all other countries. The proximity of Canada to New Zealand as compared with Great Britain is also a strong point in favor of Canadian goods, and the direct steamship service between Vancouver and New Zealand is proving to be the means of diverting a large business to our Canadian factories.

New Zealand is a safe market for our manufacturers to exploit. The numerous wholesale houses are large in buying capacity, and their business integrity and financial strength will compare with that of any other part of the world. New Zealand is not a consignment market, the wholesalers placing direct orders, paying for same against the usual bank documents.

The Canadian Government has placed Messrs. W. A. Burns and T. H. Race in charge of the exhibits, and if any of our Canadian Manufacturers desire to make inquiries regarding the sale of their goods in the New Zealand market, these gentlemen will be pleased to collect the most reliable information available on the subject. The Exhibition will not close until April 15th, 1907, so there is ample time for inquiries to be forwarded from Canada.

different stages of smelting and refining, and the manufactured products.

The visitors are more particularly impressed with our exhibits of Asbestos, Mica, Corundum and Nickel, these being to a certain extent new minerals to them.

The Cobalt-Nickel Silver ores from Ontario also attract much attention, especially the slab of native silver from the Trethewey Mine.

The Mineral Exhibit occupies a space of 3,941 feet, and consists of 36 pyramids and stands, and 19 table cases.

Among the more prominent Exhibits are Gold Quartz from Nova Scotia, Ontario, and British Columbia; nuggets from Quebec, British Columbia, and the Yukon; Gold-Copper Ores and Silver-Lead Ores, British Columbia; Copper Ores, Nova Scotia, Ontario and British Columbia; Zinc Ores, Ontario and British Columbia; Mercury, British Columbia; Antimony, Nova Scotia and New Brunswick; Nickel and Copper Ores, Sudbury, Ontario; Iron Ores from Nova Scotia, Quebec, Ontario and British Columbia; Metallurgical Products from the Trail Smelter, Trail, British Columbia; Exhibit of Ferro-Chrome, Ferro-Silicon, and Ferro-Phosphorus, by the Electric Reduction Company of Buckingham,



Canada's Minerals—New Zealand International Exhibition.

Apart from the exhibit of manufactured articles, the Canadian Government has installed several exhibits, illustrating the natural resources of Canada, such as Minerals, Agriculture, Fruit, Maple Syrup and Honey.

These exhibits are very much admired. The apple exhibit consists of 37 varieties, the quality of which is very much admired. There is no doubt that there is a good market in New Zealand for our British Columbia apples. With a direct steamship connection, fruit can be landed in New Zealand during the early spring months. California apples were bringing 8d. per pound in October and November.

The Canadian Mineral Exhibit is the largest and most comprehensive collection of Economic Minerals at the Exhibition, and is proving to be one of its most educational features, the arrangement being altogether different from any of the others.

Where possible the metallurgical and other products are shown, illustrating the ore as it comes from the mine, the

Quebec; Manganese, Nova Scotia; Chromic Iron, Quebec; Molybdenite, Quebec, Ontario, and British Columbia; Tungsten, British Columbia; Coal from Nova Scotia, Alberta and British Columbia; Petroleum and Products, Imperial Oil Company, Sarnia, Ontario; Apatite, Quebec; Iron Ochre and Paints, Canada Paint Company, Montreal; Salt, Canadian Salt Company, Windsor, Ontario; Corundum, Craig Mine, Raglan, Ontario; Corundum Wheels, Hart Corundum Wheel Company, Hamilton, Ontario; Asbestos from the Thetford and Black Lake Mines, Quebec; Mica, Quebec, Ontario, and British Columbia; Graphite from Ontario and Quebec; Felspar, Quebec and Ontario; Building Stones, Granite, Syenite, Sandstone, Limestone and Dolomite; Ornamental Stones, Serpentine, Marble, Jaspar Conglomerate, Sodalite, etc., Marls, Clays, Cement, Infusorial Earth, Barite, Magnesite, Talc.

In front of each stand is a sign, giving statistics and other information regarding the minerals.

THE CORROSION OF IRON AND STEEL.*

By F. N. Speller.

This is a question which has brought forth many opinions, but in most cases with little practical evidence. After investigating closely many cases which have come under my observation during the past two years, where the two materials were put in service together and subject to the same conditions, I have never yet found any decided difference. The impression which exists in some minds that wrought iron pipe is much superior to steel in durability may have originated in comparisons made years ago when the practice of making sound, low carbon steel was probably not so well understood as it is to-day, or it may have been a mistaken identity, for we frequently find iron mistaken for steel, especially if it happens for some cause or other to be pitted, but in most cases the idea has apparently been spread by heresay and accepted without investigation.

In view of the inherent differences between iron and steel made for various uses, it would seem safer to compare each class by itself, i.e., wire, sheet, pipe, etc., each under the conditions of service to which they are subjected. The essential conditions of corrosion—air, water, and carbonic acid—are easily duplicated in the laboratory; but in practice corrosion is accelerated by the presence of sulphurous and other solutions, stray electric currents, heat and numerous other influences difficult to trace.

It will be conceded that such conditions tending to seriously affect corrosion are rapidly on the increase, especially in and near the great centres of population. Hence, we should be slow to draw conclusions from the statement that steel does not last nowadays as it did fifteen or twenty years ago. Whatever was the relative standing of the two materials years ago (and opinions differ widely) what we are more concerned with is how do they stand to-day, and how can they be best protected from corrosion? Laboratory results, while open to criticism as not truly representing actual conditions in the field, are valuable as indicating the relative standing of a number of samples under conditions known to be uniform—something difficult to be sure of in service tests. The writer has in his tests lately used a 5 per cent. hot solution of brine through which a continuous flow of air is pumped. One reason for adopting this solution is that a number of tests are on record which indicate that steel in general seems to be somewhat more susceptible to this environment than wrought iron, and further, that the loss is quite considerable in a reasonable time (about 1-10 g. per square inch per month). A number of average results on pipe materials are given in the accompanying table, comparison being made with good wrought iron as a standard:—

Average Results of Recent Comparative Tests on Corrosion of Wrought Iron and Pipe Steel.

(Losses per unit of surface exposed compared with puddled iron as 100.)

Conditions of test.	Authority.	Duration of test.	Charcoal iron.	Puddled iron.	Pipe steel.	Test started.
1. Aerated distilled water. Normal temperature.	Navy. Departm't.	64 wks.	100	...	94.5	1901
2. Sea water. Normal temperature.	H. M. Howe.	2 yrs.	...	100	119	1897
3. Aerated brine. Normal temperature.	Laboratory Nat'l Tube	6 mths.	...	100	106	1904
4. Aerated water. 180 degrees F.	Laboratory Nat'l Tube	3 mths.	...	100	90.6	1905
5. Aerated brine. 180 degrees F.	Laboratory Nat'l Tube	3 mths.	80	100	75.3	1906
6. Aerated sea water. 180 degrees F.	Howe.	3 mths.	94.4	100	94.2	1906



Section of Canadian Court—New Zealand International Exhibiton.

There are two possible ways of protecting steel: 1, by use of efficient protective coatings; 2, by treatment of the metal in the course of manufacture. Experiments have been under way for some time at the works of the National Tube Company with the object of increasing the durability of pipe steel. As a first step in this direction a process has been developed which after a year and a half's trial has given results showing a decided benefit to the steel, especially in the uniformity with which it corrodes. The treatment consists in a mechanical working or kneading of the metal, which tends to produce greater uniformity, and

* A paper read before the Engineers' Society of Western Pennsylvania.

to improve the quality and texture of the steel. Doubtless much of the steel does not need this treatment, but in such cases it does no harm, and on the whole raises the average standard of the output. Tests marked Nos. 4, 5 and 6 were made on this steel.

It has been recognized that service tests must be made before any certain conclusion can be reached. A number of such tests have been made on this steel pipe in sulphurous air, salt water and mine water during the past year, precautions being taken to have an equal number of pieces of "genuine" wrought iron pipe alongside under the same conditions. The results so far have shown the steel so treated without exception to be at least the equal of and generally decidedly superior to wrought iron.

ARTIFICIAL ROCK FROM SLAG.

Under processes recently patented a remarkable step in advance in the manufacture of stone-like substances has been achieved. The inventor has succeeded in what is little short of a reconstruction of many well-known qualities of building-stone. By a slight modification of his processes he produces all kinds of marble, and one of his chief successes has been in the manufacture of lithographic stone, which has been pronounced by experts to surpass some of the best samples of the natural material.

In using slag for the production of an artificial stone it is broken up in a stone-breaker with crushing jaws of the usual type, and is ground to a powder in a disintegrator. The powdered slag is then mixed with quicklime, seven parts of slag being used to one of lime, and the substances are thoroughly amalgamated in a revolving mixer and subsequently "pugged" with an excess of water to form a pasty mass of creamy consistency. This is subjected to very heavy pressure in metal moulds, squeezing out nearly all the water, and formed into blocks of the consistency of chalk or stiff marl. After the blocks are quite dry they are placed in stout iron cylinders from which the air is exhausted, and when a complete vacuum is obtained carbonic acid gas is introduced and is allowed to permeate the stone for a period of three days. By this treatment the hydrate of lime becomes recarbonated and serves to bind the mass into a substance as hard as rock.

If for the slag a basis of marble, limestone, or dolomite is substituted it becomes possible to prepare a mixture, as heretofore described, in which from three-fourths to seven-eights consists of calcium hydrate, or a mixture of calcium and magnesium hydrates, obtained by calcining the stone. These blocks can readily be impregnated with the carbonic acid gas, by which means the lime and magnesium are converted into carbonates and serve to consolidate the mass and turn the whole substance into stone. In the case of marbles, or when making lithographic stone, a certain amount of coloring matter can be added to the paste. The finished stone or marble is capable of a high polish, and is said to possess all the weather-resisting properties of the natural rock used in its production.

A plant is now working at the Barrow Steel Works, says the London "Commercial-Intelligence," for the extraction of iron from the accretion of slag. The process adopted is a magnetic one, the slag being first pulverized and then submitted to the influence of very powerful magnets. The system adopted has passed the experimental stage, and it is stated to be a commercial success.



Canada's Minerals—New Zealand International Exhibition.

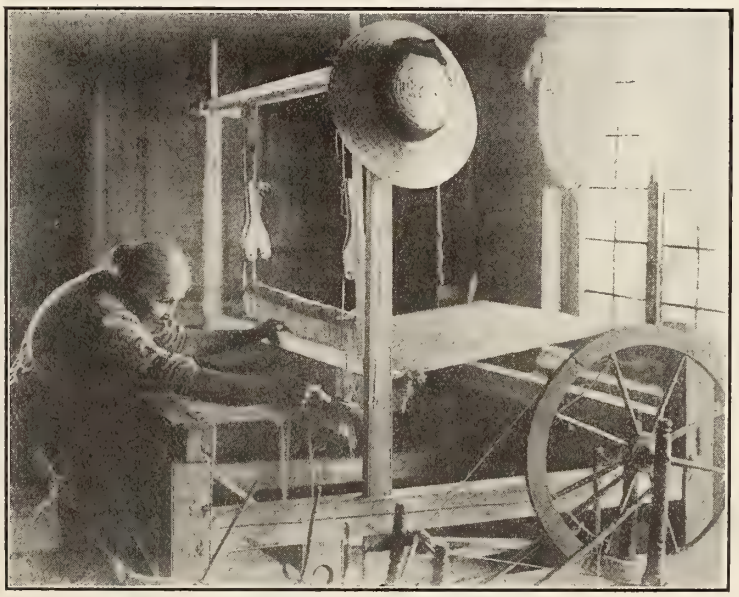
An Electric Locomotive.

The Shawinigan Falls Terminal Railway, operating the railroads at Shawinigan Falls, which form the connecting link between the Canadian Northern and the St. Maurice Valley Railway systems, have placed an order for a 600 h. p. electric locomotive with the Canadian General Electric Company, Ltd., of Toronto. The locomotive will be used for shunting and handling cars in the sidings. This is the first locomotive of its type to be used in Canada. The development of electricity from waterpowers throughout the country will make this experiment of great general interest.

Canadian Industries in the Home.

THE Woman's Art Association of Canada has for many years been actively engaged in developing the home arts and handicrafts in the various provinces of Canada, and gradually this work has extended until it reaches from the Atlantic to the Pacific, Canadians everywhere having a part in it either as producers or consumers. Canada was far behind other nations in looking after and encouraging home industries, but the rapidity with which the Art Association is advancing and exploiting, the industries, which it has been encouraging for twenty years, is bringing some characteristic crafts well to the fore.

The homespun woolens and linens of the Quebec women have become under the artistic guidance of the Art Association, famous in the United States and in Great Britain and several European countries. During the past year exhibitions have been sent to the chief cities in Canada, from Charlottetown, P. E. I., in the East, to New Westminster in the West, and Canadian women are rapidly learning the art of "rough dressing," so well known to English and Scotch women. A depot has been opened at 52 New Bond St., London, England, and Canadian homespuns have been sent all through the United States, as well as to Italy, Sicily, Holland, France and Germany. The energetic committees of the Association have given many thousand of dollars worth of orders to the Quebec women, and have been well repaid for their arduous efforts in making a market for the work by the rapid increase in beauty and workmanship of the goods, showing how responsive they can be when interest is taken in their work and it is encouraged. These homespuns are already much sought after as well for their beauty of texture as for their durability. The embroideries of the women of the North-West, which are of Russian and Oriental design, are successfully combined with the woolens and linens of the East as trimmings. Their needlework is so beautiful that the Association hopes it will be an element in recreating an interest in needlework in Canada, where it is almost a lost art, as compared with the work of our great-grandmothers. However, that may be, it is a resource which is appreciated by the lonely isolated women of the North-West, both as a remunerative employment, and as a refining and artistic interest.



Quebec Woman with Spinning Wheel

Basketry Among the Indians.

The North-West and the Pacific Coast furnish another interesting handicraft, namely, Indian basketry. Beautiful examples are made by the Fraser and Columbia River Indians, the Indians of the Coast, Alaska and Queen Charlotte Islands. It is most desirable that the distinctive character of Indian basketry should be retained. The finer baskets take months to make and are very valuable. They are artistic and useful as well as durable.

As the French brought with them from Brittany the art of weaving and tufting so the Irish and English women coming to Canada had their traditions of Old World arts, especially of lace-making. The Association has found here and there skilled makers of lace, and in some instances has discovered and restored old designs which had been lost in the Old Country and in Europe. Good specimens of Irish crochet, Carrick Ma Cross, Limerick, Honiton, Duchess, and point laces of Canadian manufacture are shown.

Rug and Carpet-making.

The primitive industry of making rugs and carpets from the old clothes and surplus wool and yarn of the farm homes is being revived and promises to be a very popular product, as ready sale is found for all that is good in color and design. All these industries, except the lace-making, have been very much advanced by inducing the people to give up the Aniline dyes, and to use the old-fashioned vegetable dyes, which do not fade or get rusty. These comprise the indigo, carmine, fustic and logwood, and those formed with bilberries, elderberries, golden rod, butternut, sumac, and other resources of nature, a perfect gamut of artistic colors for our pioneers, who spun, wove, dyed and designed, not only their clothing, but their carpets, curtains and couvertures. It was necessity and utility with them, but they loved the product of their own hands and brains and regarded their handwork with pleasure. It gave as compensation a self-respecting, independent, economic, Canadian pioneer, very different from the present generation of luxury-loving people.

The Result of Encouragement.

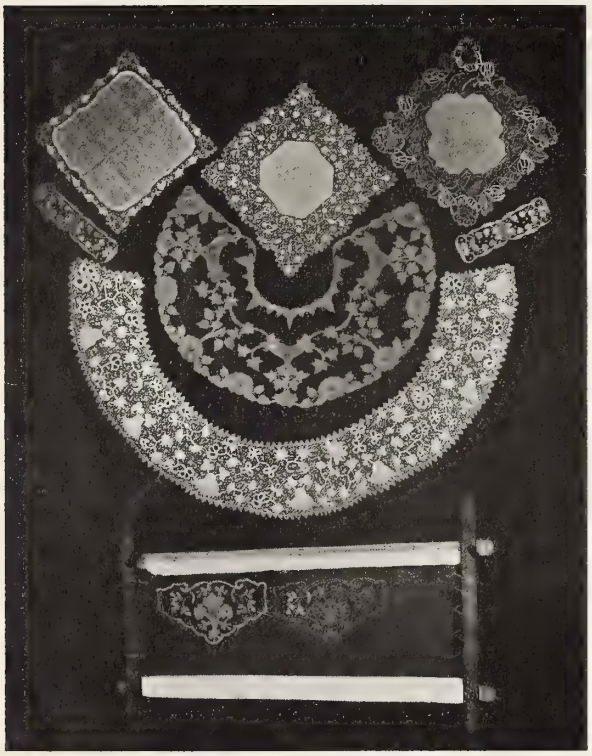
The Art Association recognizes that from a generally diffused love of color, form and design arises that thing we call National Art. The many having skill and taste actively used, genius will happen in other and higher fields. With knowledge, patience and skill surely such efforts must bring about a growth of artistic feeling among Canadians. Through the wide development of home industries and handicrafts should spring up a more artistic feeling among our people, a greater love for simple beauty, a greater hatred of the cheap and false, a greater care of the natural beauties, a greater determination not to be content with "good enough," but a determination to do each piece of work as perfectly as possible.

We have many people in Canada who appreciate simple, suitable, beautiful things, and buy them in their travels from

the people of other lands. These people are coming to our land. What are we going to do with their skill? Can we not find a market for good handicraft made by them here when so much is spent buying it abroad?

Field for Skilled Workmanship.

The important point, however, is that we demand good things of a kind and character that can be made, then the skill and taste of the workers will be strengthened. In every community there is waste material, waste time, waste talent, which in earlier and more strenuous times served the high purpose of developing taste, industry and economy. To-day the same waste material exists in many communities, and we deplore the lack of industry, of artistic ability, the ever-increasing desire for show and the meretriciously cheap and unwholesome. The machine, the factory, and the shop, are necessary and belong to the modern world; but the vitality of them all is the individuality which they oftimes ruin. What machine was ever made that could do that amazing



Laces made by Canadian Women at Home

piece of weaving the *Ceinture flêche*, formerly so familiar to visitors in Quebec and Montreal and now so rare, though still prized by devotees of our winter sports? The art was probably French in the beginning. The pattern, however, is decidedly Indian. The arrow pattern appears in all Indian decorations, whether basketry, pottery or beadwork. The *Ceinture flêche* should be carefully preserved as belonging to one of the most distinctive, characteristic and beautiful of our pioneer handicrafts.

Old Handicrafts Forgotten.

Life in Canadian rural districts near the cities and towns has grown more prosaic to a marked degree in the last thirty years. There are many villages and communities both East and West where the people are living the lives of their forbears of two hundred years ago, with the important difference that while they go not to the outside world, it comes to them, in the shape of cheap factory-made utensils and fabrics. These people have not progressed; it is retrogression, and reacts upon the entire nation. They abandon the useful, economical and oftimes artistic handicrafts, of their ancestors, for that civilization which is represented by the village store, and means frequently shoddy, badly woven cottons, printed with aniline dyes which look pretty at first but dishearten the wearer as soon as the sun appears or the necessity for washing comes.

In Prince Edward Island steps are being taken to induce those to whom some resource, such as spinning and weaving would be a boon, to again raise flax, set up their looms, and give us some of the good old-fashioned linen which will last a life-time, and not need renewing each season at the January sales. It is all a matter of public opinion how far this work can be gone on with; certainly not farther than is useful and profitable. But that there must be desirable and wholesome results will be evident to everyone who thinks of the question or who loves to see the lives of our people dignified by honest, useful, economic and beautiful production.

Artistic Work in Quebec.

The tuftier couvertures, portieres and rugs of Quebec are a tradition of Brittany, which the French brought with them to Quebec, and show charming designs. The workers respond very quickly, showing an artistic quality much to be prized. The "pine tree" pattern, the "fleur de lis," the "Little Mary," so amusing in its naiveté, and the excellent geometrical designs, are capable of many and various combinations of both materials and colorings. Linen, cotton and wool are woven and worked together in an almost inexhaustible variety. The patterns are pulled up through the fabric with the help of a bit of wood or some small instrument. The Acadians of Louisiana are said to have done practically the same work. Both art and skill are shown in their conventionalized designs, coloring, spacing and combination.

Products Becoming More Popular.

The Irish Cottage industries launched and carried on by women of high position, who have given their time and energy to secure the success of the scheme, have resulted within a few years in no less than £100,000, for the poor of the country districts of Ireland and now under the active patronage of the Viceroy of Ireland and Lady Aberdeen, the beautiful hand-work of the Irish peasantry has received a great impetus.

Canadian industries have had the distinguished patronage of Her Majesty Queen Alexandra, who purchased from the Bond Street Depot, London, and of H. R. H. Princess Louise, and the Princess of Wales. Lady Minto, when in Canada, was very much in sympathy with the work, and purchased many pieces of homespuns and Doukhobor and Galician trimmings. Her Excellency Lady Grey is also deeply interested in the development of the home industries by the Woman's Art Association of Canada, of which she is Honorary President. The Canadian Government made it possible for the Association to have an exhibit at the St. Louis Exposition, where the work of fostering home industries became so well known that the people of the United States are our most ardent and admiring supporters and never lose an opportunity of procuring homespuns.

In Russia, Germany, Italy, England, Scotland, Ireland and the United States work for the marts of the world is being done at the fireside, and in Canada women can help earn money during the long winter months, when the ordinary work of the farm is at a standstill. The aims then of this movement, inaugurated and carried on by the Woman's Art Association of Canada, are briefly: To preserve and develop all handicrafts and home industries, which are useful and economical to aid new settlers possessed of artistic

and skilled handicrafts to use their knowledge; to open markets at home and abroad for Canadian handicraft; to hold exhibitions, give prizes and teach the value of producing and of using such work; to pay cash to the workers, so they will not be under the necessity of trading their product at the country store; to add interest to lives that are oftimes monotonous, hoping that these elements of interest and remuneration may deter immigration from rural districts to large cities and to the United States.

Twenty years of constant effort has brought encouragement to the Art Association and assurance of the philanthropic and artistic value of its efforts to the Canadian people. The amount produced and sold has doubled in 1906, and will undoubtedly do the same in 1907. The interest has increased proportionately.

MODERN APPRENTICESHIP.

One of the most disquieting features of our modern industrial system is the decay of apprenticeship. The causes of this decay are many, and cannot be dealt with at the present stage. Its effects are always with us in the shape of a vast army of unemployed. One of the most hopeful plans for thinning the ranks of this doleful host, the despair of legislators and reformers, is to increase the number of skilled workmen. Even though there may not be work for all such in the Mother Country, yet our colonies are in constant need of trained operatives, so that a man who has served a thorough apprenticeship has an excellent chance of earning a good living elsewhere, if not in England.

There is a danger at the present time that the zeal for technical education and the multiplication of trade schools may lead many to underrate the necessity for apprenticeship. Much has been said in these articles with regard to the necessity for the continued education of apprentices. It must be understood, however, that apprenticeship is quite as important as education. The apprentice who does not receive instruction in the principles which underlie his work will develop into an unintelligent worker by rule of thumb.

On the other hand, one who does not undergo the severe drudgery of the workshop will fail utterly when brought face to face with the practical demands which are made upon all operatives. It follows that the modern system of apprenticeship should be adopted in all cases. Under this system the apprentice spends a portion of his time in the workshop, while during the remainder he attends classes in order to receive instruction in the technique of his trade. A further and most important point is that the master is bound to see that his apprentices learn every branch of the trade and not one branch only.

With regard to the attitude of workmen, the general opinion expressed by trade societies on this matter is that they would be sympathetic, and in any case not antagonistic.

An excellent concrete example of what may be done in this connection is shown by the system of apprenticeship carried out by the Plumbers' Company, who, many years ago, formed an Apprenticeship Board, which conducts examinations for apprentices at certain fixed intervals, and binds the apprentices under some registered master plumber approved by the Board. The indenture includes a special clause that the apprentice shall be given facilities for learning the technique of his trade at classes under the supervision and teaching of practical plumbers.—Commercial Intelligence.

HOW SOUTH AFRICANS DO BUSINESS.

In a recent letter to the Department of Trade and Commerce Mr. W. T. R. Preston gives some valuable information on the methods of doing business in South Africa.

"I was not aware," he writes, "until pursuing an investigation, of the mode or manner in which business is done between South Africa and the great purchasing markets of the world.

"While very many orders are sent direct to either traders or manufacturers in Great Britain, Canada and the United States, the shipments are almost invariably made through commission agents. I found fairly considerable quantities of Canadian cheese in the wholesale and retail establishments in South Africa; in every instance, however, so far as my investigation has taken place, this staple Canadian commodity has not come direct from Canada, but has been purchased in London.

"In going through the English market it is only fair to assume that it must pass through the hands of one or two middlemen or commission agents, thus increasing the cost of the articles in question to the buyer in South Africa. In reply to an enquiry in one large establishment as to why



Shawls, Rugs and Draperies, made in Canadian Homes.

the cheese was not purchased direct in the Canadian market, the proprietor informed me that a neighboring merchant had upon one occasion made his purchase of cheese in Canada, but the cheese arrived here in an unsatisfactory condition, due, he believed, to the indifferent manner in which the Canadian merchant had selected the consignment. In consequence of this a very natural prejudice had arisen in regard to dealing directly with Canadian merchants.

"This is another illustration of the absolute necessity of the greatest possible care being taken in the transactions of business with a foreign country. One such mistake as this on the part of a careless shipper or dealer is liable to create unfair prejudice against Canadian merchants generally, and the trade of the Dominion of Canada must in the long run suffer.

"This naturally brings up the question as to whether a profitable commission business might not be established at one of the centres of Canadian trade with a view of endeavoring to get possession of the trade which is now transacted by London and New York commission merchants. Just as soon as mutual confidences could be established between such a Canadian house and the business interests of South Africa, an opportunity would certainly be afforded for the development of considerable trade and commerce."

SMOKE TALKS

By R. C. HARRIS.

SMOKE CAN BE PREVENTED.

THE concluding proposition in the February Smoke Talk, reads:—"The words smoke and waste as applied to combustion of fuel under boilers may be regarded as synonymous, and while a clear stack does not always attest good combustion, I shall in the next article endeavor to adduce reasonable proof of the proposition contained in this paragraph."

The expression, "Smoke Consumption," as applied to practice, is a misnomer. Smoke may be prevented by a proper observance of the requirements requisite to efficient combustion, but once the gaseous and solid elements escape to the stack, it becomes an expensive expedient to consume them and apply the resultant heat to the performance of useful work. That portion of coal which if unconsumed forms smoke, should be burned in the fire box, and return mechanical energy.

The combustible portion of fuel consists of carbon, hydrogen and sulphur, while atmospheric air is a supporter of combustion, the oxygen constituent of 23 per cent. being required to form certain chemical combinations with the fuel elements, while the 77 per cent. of nitrogen remains neutral. These combinations follow certain physical laws, and their individual composition is always in fixed proportion.

A chart showing the process of combustion and the consequent chemical combinations, would be of interest and use, but is omitted because these articles are designed to be popular rather than technical. I must ask those versed in technics to bear this in mind, and also remember that approximate rather than ultimate analysis must govern in the accomplishment.

The British Thermal Unit, abbreviated B.T.U., is that quantity of heat required to raise the temperature of one pound of pure water one degree Fahrenheit, at or near 39.1° F., the temperature of maximum density of water. The worth of fuel is gauged by the number of B.T.U. per lb. which it contains, while the percentage efficiency of the grate, furnace and boiler, is indicated by the ratio existent between the calorific value of one pound of the fuel used, and the heat accounted for in water, per pound of coal, the former to be ascertained by analysis and the latter by evaporative test.

In the consumption of one pound of hydrogen, 62,000 B.T.U. are liberated, while the complete combustion of one pound of carbon produces energy equal to 14,500 B.T.U.

In the proximate analysis of fuel but four quantities are recognized, viz.:—

Fixed Carbon.
Volatile Matter.
Ash.
Moisture.

Fixed or free carbon is that portion of the fuel remaining in the form of coke after the distillation of the volatile ingredients.

Volatile matter consists of the vaporized constituents of the fuel, together with the liberated oxygen and hydrogen, and disengaged carbon.

The total combustible is that portion remaining after ash and moisture have been deducted.

If one pound of carbon is completely consumed by being burned to carbon dioxide, 14,500 B.T.U. are liberated, but if imperfect combustion is effected this carbon burns to carbon monoxide, the heating value of which amounts to but 4,500 B.T.U. per pound.

The Appearance of Smoke.

Smoke results; and valuable ingredients, in the form of poisonous gas and finely divided carbon particles, are delivered to the atmosphere, to the annoyance and hurt of the general public and the financial loss of the offender.

In like manner, the volatile matter, unless furnished with an adequate supply of atmospheric air, at a temperature sufficiently high to ensure that the gases will not be materially chilled, will also be discharged unconsumed.

Whenever a stack emits dense smoke, it is an earnest that the man who is paying the coal bill is receiving from the fuel pile, during such omission, but one-third of that return in heat energy which he should reasonably expect, and which is possible of attainment.

If an employee in a factory were to loiter two-thirds of the day, his tenure of engagement would cease the moment that the theft of his employer's time became evident, but the same manufacturer, with characteristic lack of interest in the power end of his plant, permits a daily waste of valuable fuel elements, which affect in vastly greater degree the cost of production, and defends the improvidence by the statement, which is in many instances a conviction, that smoke cannot be prevented.

I feel that it has been reasonably demonstrated in this article, that smoke is a product of incomplete combustion, that incomplete combustion is improvident and wasteful, and therefore that smoke and waste are synonymous in this particular.

In the next contribution I shall show why incomplete combustion forms smoke and indicate the general remedy.

THE LAW OF WAGES.

Every employee pays for superintendence and inspection. Some pay more and some less. That is to say, a dollar-a-day man would receive two dollars a day were it not for the fact that some one has to think for him, look after him and supply the will that holds him to his task. The result is that he contributes to the support of those who superintend him. Make no mistake about this: incompetence and disinclination require supervision, and no one else does. The less you require looking after, the more able you are to stand alone and complete your tasks, the greater your reward. Then if you can not only do your own work, but direct intelligently and effectively the efforts of others, your reward is in exact ratio, and the more people you direct and the higher intelligence you can rightly lend, the more valuable is your life.

The law of wages is as sure and exact in its working as the law of the Standard of Life. You can go to the very top and take Edison, for instance, who sets a vast army at work and wins not only deathless fame, but a fortune, great beyond the dreams of avarice. And going down the scale, you can find men who will not work of themselves and no one can make them work, and so their lives are worth nothing, and they are a tax and a burden on the community. Do your work so well that it will require no supervision, and by doing your own thinking, you will save the expense of hiring some one to think for you.—Elbert Hubbard.

Insufficiency of Cars and Locomotives.

The Board of Railway Commissioners for Canada will Investigate the Lack of Rolling Stock, which has been the Subject of much Complaint from Shippers.

IN view of the many petitions and representations which have been made to the Board of Railway Commissioners from time to time regarding car shortage, and demanding reciprocal demurrage, sittings of the Commission were held at Ottawa on February 5th, 6th, 7th and 8th in order to receive information and discuss the same. Amongst the subjects considered were the following:—

Supply of equipment and adoption of methods to ensure more prompt and efficient service on railways.

Car supply for traffic originating on short local lines, but to be carried for long distances over other lines.

Equipment of cars carrying lumber and similar commodities, and rules regulating the same.

Supply of ice at convenient points for the icing of refrigerator cars for shipment, and provision for re-icing the same in transit for export and to the Western Provinces.

The Board asked each railway company for a full statement respecting its rolling stock and equipment of all kinds, showing among other things:—

(a) The number of cars of different kinds, such as box, flat, etc., with their capacities; the number of locomotives of different kinds, such as road, switching, etc.; other kinds of rolling stock.

(b) The number of each of such different kinds and capacities added in the year 1906.

(c) The number of each of such different kinds permanently disabled, used up, or abandoned during the year.

(d) The number of cars, locomotives, etc., of the various kinds available for use during the year 1906.

(e) The number of new ones of each of such different kinds and capacities now contracted for, and the times when these are expected to be received.

(f) The number of freight cars supplied by railway companies to branch lines not owned, but operated or controlled by them and other independent roads, known to have limited supplies of their own, and to what extent trunk lines have thereby reduced their own transportation capacities.

(g) The number of locomotives leased or let to any such lines, and whether, or to what extent, companies have thus reduced their carrying powers.

(h) Also a statement showing whether companies possess station and terminal facilities sufficient for loading and unloading cars and delivering traffic with expedition, and the extent to which such facilities are defective.

The leading railways were asked to furnish a reply in the matter by March 1st, except those in the Maritime and Western Provinces, which have been given until the 15th of March.

Ruling of Chairman of Commission.

In making these demands from the railways the Chairman of the Commission discussed the whole question of the supply of rolling stock in relation to the construction of new lines. His remarks were in part as follows:—

"The Board, both recently and in the end of the year 1905, received many complaints of insufficiency of the supply of rolling stock and other equipment upon railways, and of delays in the transportation and delivery of traffic. The Board made some enquiries into these matters, and it has reason to believe that some railway companies have not been supplied with rolling stock and other equipment necessary for enabling them, without delay, to receive, carry and deliver traffic, and have failed to carry and deliver with due diligence.

"The Board also fears that railway companies have not fully realized their responsibilities in these respects, and have not made the efforts which they might and should have made to give proper and efficient service.

"The Board realizes that circumstances beyond the control of railway officials, and an unprecedented development of traffic, which was not and could not reasonably have been foreseen, have contributed to make the situation worse than it would have been otherwise.

"The Railway Act requires companies, according to their respective powers, to furnish *adequate* and *suitable* accommodation for the receiving, loading, carrying, unloading, and delivering of all traffic offered for carriage upon their railways, and without delay, and with due care and diligence to receive, carry and deliver all such traffic, and to furnish and use all proper appliances, accommodation and means necessary for these purposes.



MR. J. E. WALSH.
Who succeeds Mr. J. R. Marlowe as Manager of the Transportation Department, C.M.A.

"The Board desires to receive from all railway companies information as to the extent to which they have complied with these provisions of the statute; to what extent they have failed to do so; and to what circumstances they attribute, and on what ground they excuse, any such failure.

"The Board desires also to be informed as to the steps which railway companies are taking to provide themselves with the equipment necessary to fulfil the requirements of the statute; whether these steps will, in the opinion of the responsible officials of the respective companies, enable them fully to comply with the requirements of the statute in the future; and, if not, on what grounds they excuse themselves for not taking such steps; also whether such officials have

reason to believe that the traffic upon their respective railways during the next ensuing year will be greater, less or equal to that of the year last preceding, and on what ground they base their belief in these respects.

The Board has hitherto felt a difficulty in making orders for the supply of cars or other equipment upon specific complaints for fear that this might result in taking from others the public facilities to which they were equally entitled with complainants.

"The Board has also felt that the unprecedented activity of business could not have been fully foreseen by the officials of the railway companies, and that it could not reasonably adopt a policy which would have penalized railway companies for failure to have the necessary equipment, or to be fully prepared to handle traffic with due expedition.

But the Board thinks that the circumstances of the last two years should serve as a warning; and that measures which would not have been just and reasonable under previously existing circumstances may be so in the future, especially after companies have been fully notified of the views which the Board takes.

"The Board is also of the opinion that the making of large expenditures in improvements of railways, and especially in building new lines of railway, furnishes evidence of the powers of railway companies in respect of financial requirements, to supply all necessary rolling stock and equipment; and the Board will also feel obliged to consider carefully whether railway companies which are extending their lines, and thereby rendering necessary a further supply of men, rolling stock and equipment, are justified in doing so without fully equipping the lines which they are already operating.

"The Board does not desire to hold railway companies to a higher standard than seems to be reasonable, but it proposes in the future to adopt all means within its power to make railway companies live up to a reasonable standard, and to give to the public, so far as circumstances render it reasonably possible, the service which the statute requires."

So much has already been said on this important subject that further comment is unnecessary, other than to say that a point has been reached where the insufficiency of rolling stock threatens the prosperity of the country, and it is interesting to note that the Railway Commission is alive to the situation. The result of their enquiry will be watched with interest by the shipping public.

NEW SULPHUR PROCESS FOR WOOD PRESERVATION.

Consul R. M. Bartleman, writing from Seville, says that the faculty of wood to withstand atmospheric pressure is so small, compared with its mechanical resistance, that a close study of new systems aiming at its preservation is of great interest industrially.

All the wood preservative methods now employed are defective in so far as they make use of solutions, the evaporative nature of which makes their action upon the wood effectual only for a certain time. The new method in question, which has been patented in Germany, goes further and utilizes a fixed body, which becomes solid upon being instilled into the pores of the wood. This substance is sulphur, the physical properties of which offer interesting advantages, being fusible at about 115 degrees, a temperature which the wood can support without any perceptible change. The sulphur is applied in liquid form, and in hardening completely fills up all the interstices of the fibrous tissue.

Although sulphur oxidates easily if subjected to a high temperature, at a medium temperature it remains impassive, resisting not only the influence of water, but also that of acids, concentrated or diluted, and alkaline solutions, if cold. The reason why the utility of sulphur in the direction indicated had not been recognized ere now was on account of its small mechanical resistance, pure sulphur being very brittle and pulverous. But as wood possesses the quality of mechanical resistance of which sulphur is devoid, the compound of these two bodies may, under the proper conditions, easily acquire valuable industrial properties, as, for instance, the vulcanized caoutchouc, which the wood, impregnated with sulphur, resembles a good deal.

To protect wood by means of sulphur the following must be observed, viz.: Sulphur is fused in a befitting receptacle, making use of steam to avoid an excess of heat, which deteriorates the sulphur. Into this liquid, and at a temperature of about 140 degrees, are steeped the boards which are to receive the treatment, care being taken to immerse them completely. The foam which gathers at first, called forth by the separation from the wood of the air and humidity it contains, disappears at the moment the wood thoroughly assimilates the temperature of the bath, which is then lowered to 110 degrees. At this point the sulphur becomes hard, and, while the air contracts itself, the sulphur penetrates into the fibrous tissues, propelled by atmospheric pressure. The boards are then slowly withdrawn from the bath, allowing a thin and even coat of sulphur to form and cover the wood, as any superfluous surcharge can be removed only with the greatest difficulty afterward. This coat of sulphur has a vitreous appearance, and forms a very tenacious crust, excluding all tendencies to chip or break.

The degree to which the wood is impregnated varies according to the nature of the wood, the temperature, and the duration of the bath. It may be gauged by the increase in weight of the boards, which amounts to from 30 to 35 per cent. where the process is conducted in an open receptacle, and to 100 per cent. if in a vacuum pan. Theoretically, it may be said that a complete fullness of the pores of the wood would increase its weight by 200 per cent.

In numerous experiments poplar was the best wood to take the sulphur treatment. Oak and pine wood do not admit of the process quite so favorably, because their dry distillation begins at 140 degrees, which can be proved simply by observing that while the wood is immersed in the bath bubbles are continually rising, marking the escape of volatile substances. Moreover, the resin blackens the sulphur. The process in question has up to date been applied only to thin boards, but in view of the satisfactory results the hope is entertained of its soon becoming popular for timbers.—Scientific American.

Business Following Earthquakes.

A large trade in lumber developed in British Columbia as a result of the San Francisco earthquake and fire. Word now comes that there will be a very large demand for builders' hardware, cement, lumber, structural iron and steel, etc., for the next two or three years in Valparaiso, Chile. Of these Canada should secure a fair share. When the demand for such products was so great in California that Canadians got in on it, with all the disadvantages of doing business in a foreign country in direct competition with the people of that country, it is reasonable to suppose that in an open field, such as Chile presents, we should make a good showing. The entry to the market is a desirable thing, in addition to the actual business which is now offering. The States of South America are making great strides in progress. They are showing remarkable development. Now is the time to get a foothold.

BOOKS FOR BUSINESS MEN.

THE CRUISE OF THE NEPTUNE.

We have been so accustomed to receive as Government reports condensed statistical tables and bare statements of facts, that a work such as Mr. A. P. Low, of the Geological Survey, has produced in his account of "the Cruise of the Neptune" comes as a refreshing relief. Mr. Low was in charge of the expedition which the Canadian Government sent north in 1903 to explore the Hudson Bay district. It was about the time that the possible importance of the snow-bound islands of the Arctic regions was urged in this country and it was considered desirable not only to lay claim formally to them, but to make some provision for the administration of justice and the collection of custom dues.

The story of the expedition, which started in August, 1903, and, after wintering in the ice, returned in October, 1904, is told in an entertaining manner by Mr. Low. There was much to interest a man of his mind: the ice-flows, the beetling rocks, the sportive walruses, the whale and seal fisheries, and our interesting but little-known fellow-citizens, the Esquimos. The places that it is possible to visit and still meet no traces of civilization are fast disappearing. Yet in our north country there are wide areas where no white man has yet been, except the occasional trapper and hunter or the ubiquitous Hudson Bay Company's factor.

"The Cruise of the Neptune" is a valuable addition to the story of Canada. It gives, first and foremost, a thoroughly accurate and reliable report of the islands and the water passages, the formation of the shores and the elements which favor or hinder transportation by the Hudson Bay route. It has the additional virtue, so often absent in similar reports, of being most readable. Canadians are now enabled to become acquainted with what may yet be an important part of our Dominion.

MUNICIPAL OWNERSHIP IN GREAT BRITAIN.

Professor Meyer, of Chicago, has just issued a most useful book on this timely topic (Toronto: The Macmillan Co., $1.50). There is no doubt about it that municipal ownership is getting a black eye. So are private corporations. It is a case of rough-and-tumble, and both sides are injured. Corporation law is being reviewed and public control is being sharpened. The outcome will be satisfactory for it must be. The people are not to be balked all the time. However that is somewhat wide of the mark at present in mind.

The author of the present volume points out how disastrously the various tramways and light railways and electric lighting acts have operated in checking not only the development of the public utilities, but of the very industries on which they are based. There is clearly a valid explanation of the slow development of electric enterprises in Great Britain. Liability to expropriation on a scrap iron basis after a short period was too threatening to allow of experimenting. Other countries were therefore allowed to do that; Great Britain had to wait.

British municipal ownership seems to have started from the theory that public utilities were great money--makers; should be heavily taxed or else publicly owned. The financial end was obviously kept steadily in view wherever the municipality undertook active operation. Glasgow is an example. Although Glasgow's street railway has been profitable to the city's treasury it has not been successful in other ways. It has not developed the suburbs, and has therefore kept population congested. Morality and health in the city are notoriously bad. A less selfish policy would obviously have thinned out the people and reduced civic rates. Public ownership evidently is not philanthropy any more than private ownership.

These and other aspects of the present situation in Great Britain are pointed out. They make profitable reading, for popular opinion has been in these respects largely mistaken and needs correcting. The author makes some very interesting comparisons with developments in the United States. From the point of view of management and expansion of public utilities the United States appears to be many laps ahead of contemporary Britain.

PROFESSOR MILLER ON OUR MINERALS.

The Ontario Geologist has just issued a most timely little volume crammed full of information for the student and prospector on "Minerals and How They Occur." (Copp Clark, $1.50). Besides giving a review of rock-foundation he makes the story of minerals most interesting, tells the layman how he can recognize them, describes laboratory and field tests to them, the commercial uses to which they are put and tells the market prices of ores and minerals.

The little book is, however, serious and systematic enough to aim at serving as a text book in High Schools. In his classification of minerals, Professor Miller tries to fasten their composition as well as their names on the mind of the reader. Containing as they do the knowledge of a Professor of Mineralogy with the practical information of a provincial geologist, his writings should command a ready and wide sale.

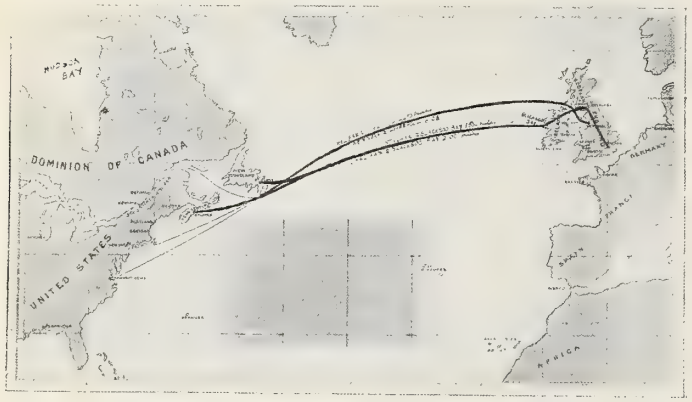
A SOUVENIR BOOKLET.

A souvenir booklet has been received from A. C. Leslie & Co., Montreal, commemorating the fortieth anniversary of their establishment. The story of business success, such as has attended this firm's efforts, is encouraging in a country like Canada, where most companies have not had time yet to grow old. An excellent cut of the late Mr. A. C. Leslie serves as a frontispiece to the booklet. To his ability and quickness to appreciate new conditions and readiness to adapt himself to them is credited the early success which made possible the later strength and enlargement of the business. In 1896, on the death of the head of the firm, the son, Mr. W. S. Leslie, assumed charge. He associated with himself Mr. A. H. Campbell in a partnership which continued until 1906, when an incorporated company was formed to carry on the business. During the same year the scope of the company was enlarged by the purchase of the business of E. H. Copland, since when fire-bricks, clay, etc., have been added to the old lines.

An interesting catalogue of steam specialties has been issued by the Canada Foundry Company, of Toronto. It is fully illustrated with cuts showing a new line of valve governors and feed controllers.

A NEW TRANSATLANTIC ROUTE.

The British press have, during the past week, discussed the proposed new route to Canada, via Blacksod Bay, on the west coast of Ireland, with a good deal of enthusiasm. The Irish papers, naturally, are very enthusiastic. The "Tuam Herald," for example, says: "We are to-day geographically the nearest point of Europe to America. Blacksod to New York is more than 400 miles nearer than Liverpool, nearly 500 nearer to Boston, and to Halifax it is 380 miles nearer. From Blacksod to St. John's in Newfoundland is about 1,500 miles. At a speed of twenty-five knots an hour this intervening distance could now be run in three days, or to Halifax in three and a quarter, or half the present time big liners take. Now is Canada's opportunity. If that progressive and prosperous country adopt an Irish port, let it be Blacksod, Galway, or Queenstown, and put on it a fleet of swift vessels. The mails and passengers can be run from Halifax to England three days before the White Star or Cunard vessels can touch Southampton. This is Canada's chance, and our chief hope of Blacksod or any other Irish port is not so much English capital or English enterprise as Canadian resourcefulness and push. If any Irish connection succeed and become a living reality, it will be mainly through and by Canada, and upon it we build our aspirations and expectations."



The Proposed Blacksod Bay Route
Distance:—St. John's, Nfd. to Blacksod Bay, Ireland, 1,500 miles.
Halifax to Blacksod, 2,100 miles.
Halifax to Liverpool, 2,450 miles.

The Dundee "Advertiser" says: "The thing can be done if there is money enough, but with the port on this side of the Atlantic at Blacksod Bay, there would be no coal for the liners at hand, and little cargo could be obtained. With the memory of the unsuccessful attempt to establish a fast mail service at Galway forty-eight years ago capitalists would require to be certain that success was within easy reach before they ventured money in an enterprise which would be certain from the first to encounter most bitter opposition from the existing lines."

Without discussing the particular merits or demerits of the proposed Blacksod Bay to Halifax steamship route, the Hon. Mr. John Howard, Agent-General for Nova Scotia, told a representative of "Canada" that he was of opinion that such a fast route is desirable. "It appears," he said, "to be generally agreed that a line, to give due prominence to the Canadian over the New York route, should consist of the fastest boats it is possible to build, and that the shortest available sea passage should be adopted. It seems certain that if sufficiently large subsidies are given by the Imperial and Dominion Governments, the fastest passenger service in the world can be inaugurated between England and Canada. This would attract and divert a large volume of traffic now going direct to New York to some point in Nova Scotia, where, after a sea voyage occupying between three and four days, express trains would be in readiness to convey mails and passengers to their destinations at all points on the North American continent. Thus many hours, and, in some cases, two or three days would be gained over the time now occupied."

It is known that Lord Strathcona is one of the warmest advocates of a fast Canadian passenger service, and it is said that he has offered to subscribe £100,000 towards any feasible project for bringing this about. In fact, His Lordship was one of those with whom the idea originated, and six years ago he is reported to have said, in connection with a proposal for a fast Atlantic service, that he was convinced that this project would tend to make Canada known more than any other enterprise. He believed the passage across the ocean could be made in four days, and he hoped the people would realize that an additional grant would be a trifle to the benefits that would certainly come to Canada when such a service was an accomplished fact.—Canada.

Production of Pig Iron in Canada in 1906.

The American Iron and Steel Association has received direct from the manufacturers the statistics of the production of all kinds of pig iron in Canada in the calendar year 1906.

The total production of all kinds of pig iron in Canada in 1906 amounted to 541,957 gross tons, against 468,003 tons in 1905, an increase of 73,954 tons, or over 15 per cent.

In the first half of 1906 the pig iron production of Canada amounted to 282,010 tons and in the second half to 259,947 tons, a decrease of 22,063 tons. Of the total production in 1906, 525,716 tons were made with coke, 16,021 tons with charcoal, and 220 tons with electricity.

The production of basic pig iron in Canada in 1906 amounted to 246,228 tons, against 172,102 tons in 1905, and the production of Bessemer pig iron to 165,609 tons, against 149,203 tons in 1905. Basic pig iron was made in 1906 by 3 companies owning 6 furnaces, and Bessemer pig by 2 companies owning 3 coke furnaces. The basic and Bessemer pig iron was all made with coke. Canada has not made spiegeleisen or ferro-manganese since 1899.

On December 31, 1906, Canada had 15 completed blast furnaces, of which 8 were in blast and 7 were idle. Of the total 12 usually use coke for fuel and 3 use charcoal. In addition 1 furnace, to use coke, was being built and 3 coke furnaces were partly erected on December 31. Work on the partly erected furnaces was, however, suspended some time ago.

The Dominion Line announce the placing of an order for the construction of a fine new passenger steamer for the Canadian trade, to be called the "Alberta," in honor of the new North-western Province. She will be 14 000 tons gross tonnage, and will be of the latest pattern in every particular to meet the requirements of the passenger trade. Harland & Wolff, the Belfast builders, have been awarded the contract.

The Consumers' Co-operative Brewery Company has been organized in Montreal with a capital of $1,000,000. A general brewing business will be done in Canada, and the activities of the company may extend to the United States.

The Housing of Workmen.

By Thos. Roden.

THE housing of our artisans and mechanics has become one of the problems in Canadian industrial development. With the great expansion in our export trade and to our requirements for home consumption, owing to the increase of population, supplemented by the tide of emigration seeking to develop our vast Western prairies, our mines, and manufactures, we have been thrown in the throes of either congestion or house famine.



A Cottage which could be built for $900.

It is not a new condition even to the older countries. Germany with her great population has, through the influence of general and technical education, become one of the foremost manufacturing nations within the last decade. The estimated proportion of population in 1887 was reported to be one-third industrial and two-thirds agrarian. This has been completely reversed and to-day it is estimated to be two-thirds industrial and one-third agrarian. This brought about the same condition that exists in Canada and it was grappled with by Federal, Provincial and Municipal Government. But Germany was and is ever paternal, and owing to the conscription laws, the passport system, and the different home life conditions, she could attempt and do what few countries dare, and while we only quote her as an example of necessity, we can take lessons from her methods, and more particularly sentiments, which have been to overcome congestion and its attending demoralization, degeneration, and discontent.

While England has always been a great manufacturing country, they had to contend with similiar conditions, and while many municipal governments have made efforts to cope with the congestion, in many instances private persons and companies have taken up the work of relief. The Cadbury Cocoa Company and the Sunlight Soap Compan notable examples, the one idea influencing all, viz., a ance of congestion and its attendant evils, and the des elevate and improve the conditions of the working cl In England the selling outright of houses has not bee tirely successful and much property has been put int hands of trust commissions, made to yield a very no rate of interest, but controlled so that undesirable or careless people could be better regulated. This haps the ideal form of arrangement, but the conditi so different in this country that it is not so easy of c In England the people are of a more conservative and are quite use to the renting system. In Canada t age citizen is more ambitious and desires propertys large proportion of our mechanics have left the olde tries with the idea of making a home for themselves. Th that they come is an evidence of an effort to better ther selves. Hence the possibility of purchase is more attractiv even though at a greater sacrifice and more expense. An project, therefore, having in view the plan of building and selling will be more readily accepted.

That something must be done if we wish to progress is uncontrovertable. Already our cities and manufacturing centres are feeling the pinch for lack of help and this is largely because the people who come or are brought, finding no suitable or economical provision for their residence, move on. To-day it is not so much a question of getting help, as the problem of satisfying it when here. In one small industry fifteen employees have returned to the United States to receive less wages than they were paid here, because accommodation at reasonable rents could not be obtained.



A house designed by F. S. Baker, Toronto, which could be built for $900.

This must be more or less the experience of all. Then again it acts as a deterrent to our young people from marrying and settling down to make good citizens. Having no home and few ties they drift about and never or seldom beco the qualified workman that long association with one dition would create.

almost needless to go into the actual conditions of ...n. We all know it exists, but to deal more with effects is the main feature. Its interference with home comforts, its demoralizing influences, causing deterioration, its irritating results, causing dissatisfied employees, we cannot wisely ignore. Hence it is imperative for manufacturers and employers to set to work and provide accommodation to meet the conditions of their particular neighborhood, and this can be best done by co-operation. It should not necessarily be with the object of helping so much one particular industry as effecting a general improvement to the community. In the Cadbury scheme at its inception only em...es were considered, but after five years trial the results ...o satisfactory that the commissioners extended the ...e to all good citizens who desired to enjoy more ...ble surroundings. The result is that a long list of ... await the vacation of any of its properties.

...ther feature is the providing of houses commen... with the earning power of the persons connected with ...ious industries of the neighborhood so that they will ...r wages that will give them reasonable comforts, and the same time enable the manufacturer to compete fairly ...t the markets of the world. Manufacturers cannot con...inually increase wages to meet conditions. They would then



Row of Workingmen's Gottages at Port Sunlight, England. They rent for $1.25 a week.

be at the mercy of rapacious landlords. They must make the conditions meet the wages, and secure for themselves a contented staff of employees.

To meet these conditions in Toronto a committee of ...anufacturers have been at work for some time and have ...mitted the following proposition. The figures have been ...st carefully considered and are in all cases on the safe ...e:

1. That a company should be organized having for its ...rpose the erection in suitable localities of one thousand workingmen's homes on simple but sanitary lines—estimated to cost $1,200 each, including land.

2. That these houses shall be sold only to persons recommended by the shareholders.

3. That each shareholder shall have the right to recommend one purchaser for each one thousand dollar subscription.

4. That the houses shall be built in blocks of 25 or more in outlying portions of the city.

5. That from the shareholders a committee of twelve be appointed who shall administer the funds. These admin...tors shall serve for a period of two or three years and ...ervices shall be honorary. The manager and office staff only shall be paid.

6. That the monthly payments made by the purchaser shall include principal, interest charges, taxes, local improvement rates, maintenance, fire and life assurance.

7. That the shareholder shall receive 4 per cent. on his paid up capital, and from the payments made by purchaser a sinking fund will be created to repay principal which it is estimated will be retired in sixteen years.



A Semi-detached House of Simple Design.

The following tables will show in what way the payments will be made and the charges arranged to meet the different requiremnets:—

A. Requirements from Purchaser.

Purchase price	$1,200
Cash payment	100



The House Famine as the "Montreal Star" sees it.

Original debt	$1,100
Interest 5 per cent.	390
Taxes, 12 years at $18	216
Maintenance and local improvements	216
Fire insurance, 12 years at $2.50	30
Life insurance	100
Administration, 16 years at $7	112
Total to be collected	$2,164
Twelve years (or 144 months) at $15	2,160

B. Standing of Company at End of Period.

Receipts—

Total receipts from purchaser	$2,260,000
Paid up stock subscription	250,000
Issue of debentures	855,000
Total	$3,365,000

Disbursements—

One thousand houses at $1,200	$1,200,000
Debentures	855,000
Interest on debentures	200,000
Taxes	216,000
Maintenance and local improvements	216,000
Fire insurance	30,000
Life insurance	100,000
Administration	112,000
Original stock subscription	250,000
Sixteen years interest at 4 per cent.	160,000
Total	$3,339,000

Margin, $26,000.

Toronto, February 21st, 1907.

FOREIGN TRADE NOTES

PROMPT MEASURES BRING BUSINESS.

A recent letter to the Department of Trade and Commerce from Mr. W. A. McKinnon is worthy of especial notice. He writes:—

"A recent occurrence illustrates the importance of using the same energy and despatch in connection with the export trade which are characteristic of Canadian business men in handling local trade. A report from this office indicated that there was an opening for certain lines of woodenware. In response, some enquiries were received from Canadian firms, one of which stated that they were sending forward samples of the goods required. No sooner had this fact been intimated to one of the importing firms than they enquired by telephone to ascertain whether the samples had been received and could be inspected at the Commercial Agency. The reason for urgency was that the firm in question had intended placing an order for similar goods that very day, and were anxious that the business should go to Canada rather than elsewhere. This may lead to large and continued orders. The incident shows once more the necessity for furnishing commercial agents with the fullest information as to prices and terms, and when possible with adequate samples; also the vital importance of promptitude in all such matters."

TRADE POSSIBILITIES.

The following statement has been prepared by the Bureau of Manufactures, showing the imports, by articles, into British India during the fiscal year 1906, imports for Government account not included:

Articles.	Value.
Cotton manufactures:	
Gray piece goods	$61,341,000
Bleached piece goods	27,464,700
Colored piece goods	30,932,600
Yarn	11,098,600
Other cotton goods	6,688 000
Total	137,524 900
Sugar	25,187,800
Iron and steel	21,531,100
Machinery and millwork	15,939,500
Mineral oil	7,222,000
Woolen manufactures	7,861,900
Hardware and cutlery	7,360,300
Apparel	7,189,600
Provisions	7,752,000
Silk manufactures	6,160,900
Copper	4,644,500
Railway material	5,356 200
Glass and glassware	3,645 300
Spices	3,508,900
Spirits	3,524,900
Precious stones and pearls	4,346,100
Instruments and apparatus	2,965,900
Raw silk	2,306,600
Aniline and alizarin dyes	2,452,700
Salt	2,135,800
Drugs and medicines	2,190,000
Paper and pasteboard	2,283,900
Cotton	1,750,600
Chemicals	2,233 700
Beer	2,039 900
Timber	2,639,600
Tobacco	2,127,800
Horses	1,515,000
Carriages and carts	2,488,300
Matches	1,906,100
Paints and colors, and painters' materials	1,598,000
Coal	1,040,700
Stationery, other than paper	1,221,500
All other articles	36,281,500
Total imports	$339,933 500

The peculiar grouping of products in the Indian report renders a few explanations necessary. The products embraced under "All other articles" were arms and ammunition, books and other printed matter, building materials, clocks and watches, earthenware and porcelain, scientific instruments, jewelry, leather and manufactures thereof (boots and shoes are included with apparel), ships, soap, tea chests, toys, umbrellas and fittings, etc.

Carriages and carts include motor cars, motor cycles, and cycles. The motor car and motor cycle trade has assumed such proportions that it henceforth will be shown separately in statistical tables. The exceptionally enticing cycle trade in all its branches has been commented on before. Provisions include fruits, salted fish, etc. The steady increase in the imports of biscuits is, says the official report, an example of the acquisition of new tastes by the Indian people. Under the head of hardware and cutlery, agricultural implements and tools and sewing machines are embraced. The United Kingdom and Germany are credited with controlling this trade, the United Kingdom, with 68.8 per cent. thereof, holding the principal share.

The articles embraced under the head of iron and steel, of which the imports from the United Kingdom, Belgium, and Germany compose nearly the whole, were bars, galvanized and tinned plates, and sheets; angle, bolt, and rod; angle, channel, and spring; beams, pillars, girders, and bridge work; pipes and tubes; nails, screws, and rivets, etc.

Under the head of machinery and mills the following were imported: Textile machinery, $7,980,800; steam engines, $3,331,400; electrical machinery, $747,100; mining machinery, $191,500; other machinery not specified.

The imports of cotton manufactures, however, lead all other imports, and their continued volume and value, notwithstanding the development of the Indian cotton industry, is remarkable. The total import of piece goods in the fiscal year 1906 amounted to 2,463,230,000 yards, of which Great Britain furnished 2,415,180,000. The imports were 2,032,720,000 yards in 1904 and 2,288,380,000 in 1905, which indicates the growth of this trade.

OUR TRADE WITH JAPAN.

The following is a comparative statement of the value of some of the principal items of import to Canada from Japan, as shown by the Monthly Return, for the eleven months ending November 30, of the two previous years:—

	1906.	1905.
Silk (raw)	$165,473	$ 40,373
Silk tissues, habutæ	283,506	194,594
Silk tissues, kaiki (incl. cotton mixture)	10,925	26,976
Silk handkerchiefs	138,071	206,700
Cotton tissues	4,532	4,204
Mats and matting for floor (Hanagoza)	38,001	59,765
Porcelain and earthenware	88,563	84,733
Lacquered ware	9,440	10,058
Straw plaits	1,776	3,462
Rice	121,004	105,779
Camphor	6,623	10,244

For the same periods Canada exported to Japan flour to the value of $70,500 in 1906, as compared with $52,054 in 1905.

THE JAPANESE SALT MARKET.

By a convention of salt dealers held at Osaka lately, it was represented to the authorities that the salt industry in Korea and Manchuria was making such progress as to assure formidable competition with the corresponding industry in Japan, writes the Canadian Commercial Agent to Japan. The industry in Japan is in the relation of a Government monopoly. The salt manufactured is taken by the Government and sold to the dealers, through whose hands it passes to the retailers and enters into consumption. The revenue derived from this source by the Government is said to be less than anticipated, and the convention advanced the idea that under the impending competition from Korea and Manchuria there would be lacking profit for the Government and for the trade. The result of this pessimistic outlook is naturally the want of another source of revenue; and the Osaka "Asahi" (Morning News) indicates that it may be found in dropping the monopoly of salt and taking up sugar instead, and that it is probable action to that effect will be taken by the Imperial Legislature at its coming session.

Enquiry from Canada, as to the market for salt in this country, under the impression that there is a large importation from the United States, is answered to the effect that the entire importation for the last past three years is slightly under $100,000 per year, chiefly from England, and that the importation from the United States is insignificant. The Salt Monopoly Bureau does not import directly, but through the medium of a German firm from Germany, a British firm from Great Britain, and an American firm from the United States. These firms having been salt importers before the enactment of the Government monopoly, were subsequently retained as the channel of importation; and it may be understood that they are prepared to buy salt wherever they can get it to the best advantage.

MEXICO REDUCES ITS DUTY ON WHEAT.

A. W. Donly, Canadian Commercial Agent at Mexico, under date of February 12th, telegraphed the Superintendent of Commercial Agencies that the duty on wheat into Mexico was "to be reduced 50 per cent. from February 15th to June 30th."

Mr. Donly also stated in his message that further particulars would follow by mail.

The present duty is 3 pesos silver for 100 kilos, or, in Canadian currency, 67.9 cents per 100 pounds, which duty is reduced 50 per cent. as above stated.

NEW BLAST FURNACE IN PORT ARTHUR.

The blast furnace in Port Arthur, which is now almost completed, is the most western of our iron smelting plants. The blast furnace proper is an immense circular steel structure, with a refractory lining intended to resist the intense heat incident to the smelting of iron ore. It is supported by great cast iron columns, and stands nearly 175 feet from the ground, looming up in the distance as one approaches Port Arthur.

Adjacent to the furnace is the roaster—for expelling the sulphur from the ore before smelting; and alongside of it are three immense fire-brick lined steel cylinders, familiarly known as "stoves," in which the air is heated before being blown along to the furnace.

The usual complement of huge steel piping connecting the various parts, is in evidence. Another prominent feature is the self-supporting steel smoke stack, nearly 15 feet in diameter at the base, and 175 feet high.

The Ham and Nott Company are reported to be about to build a new factory in Brantford, of about double the size of the present plant. The estimated expenditure is about $100,000. The company at present employ about 125 hands, but enlarged space has become absolutely necessary.

INDUSTRIAL ADVANCEMENT.

In no industry is technical skill more necessary than among textile employees. A discussion of the subject occupies a prominent place in a recent issue of the "Textile Recorder." It says: The subject of technical education is one upon which many diverse opinions are held, not as regards its ultimate value to the student, but as to the manner and system of imparting it. If the system is a perfect one, there should be no possible doubt as to the advantage gained by a student having, say, three years' tuition, over an apprentice who, passing direct into the mill or shop, works in it for a similar period. We find, however, that there is very little to choose between the two, and in many cases the apprentice has accustomed himself to shop terms, which, combined with the work he has had to perform, have rendered him superior to the technical student, although the latter may possess a considerable amount of theoretical knowledge. Theory is of excellent value, but to be of any advantage it must be judiciously combined with more than a modicum of practical knowledge. It must not be understood that we are trying to cast any slur upon the methods of teaching employed, although we have our own opinion as to their effectiveness; but, rather, are we making an endeavor to show a manner of teaching which, we venture to think, would soon show good results.

In conversations we have had with students, the fact has been impressed upon us that in many cases the students do not get enough practical work; nor are the parts of machines and their operation sufficiently described to enable them to clearly follow the lecturer in his discourse. This is certainly to be deplored. Probably the answer will be that the course of tuition is of necessity so comparatively short, and that so much has to be taught, that no greater time can be alloted to practical work. There is probably no better equipped school of technology in England than that situated at Manchester, and here, at any rate, practical work forms a considerable part of the weekly time-table. But practical work performed by the student alone is not sufficient. What is required is the employment of not one, but several assistants, who can, while the student is at work upon a machine, explain its uses, its various parts, its adjustments, and, generally speaking, everything that concerns it, and, in the meanwhile, driving home by means of practical experiments the various points. No doubt exists in the writer's mind—and this is proved by personal experience—that many students pick up a knowledge of a machine very much quicker and in a more effective manner by practical demonstrations of this kind than by hours of lecturing.

Consider, for instance, the value of an assistant to a mill manager who, just having graduated from a technical school, is able not only to take charge of a frame or machine, but is also so conversant with all its parts that he is able to adjust or alter it, and thereby increase the production or evolve newer or more novel effects. This is certainly not a Utopian ideal, but one which should not be difficult of attainment if the best use were made of the splendidly—we might say, magnificently—equipped schools situated in several of our large cities.

There is, of course, another side of the question to be looked at, namely, the quality of student attending the school. It is, of course, an impossible task to obtain brilliancy where no brilliancy exists; and, judging from the answers to some of the examination questions is has been the lot of the writer to peruse, the task of the teacher must have been an extremely difficult and arduous one. Before a student is allowed to enter a school of technology he should be compelled to pass an examination to show that he has had a good secondary education, and that he is capable of understanding the advanced matter it is intended to teach him. We do not hold with the bringing forward of semi-educated youths as technical students, and allowing them to sit for technological examinations. It is a waste not only of the examiner's but of the technical teacher's time. We must say that the system lately introduced of firms sending their apprentices to technical schools and colleges is an excellent one, and should bear good results. The youths should be able to pick up the information very quickly, as in their workshop training they have become accustomed to many, if not all, the terms employed in connection with the various machines; while their contact with skilled workmen must, if they are of any use at all, develop their faculties and make them sharp. If we were asked to outline a scheme of education which would, in our opinion, show the best results, the following would be it: A thorough education up to, say, the age of 16 or 17, in a preparatory and then secondary school. After that, two years in a good workshop or mill, followed by two or more years at such a school or college as the Manchester School of Technology or the Victoria University. Even at the end of this time the student would be no more than 22 years of age, but if he were possessed of ordinary capability he should be most excellently equipped, and ready to take a prominent place in connection with his chosen trade.

INVENTORS AT WORK.

The work of inventors is always interesting. Such great advances have been made during the last century in machines, transportation, lighting, etc., that we scarcely know the processes through which progress has gone in reaching the present stage of development. A book which is no less instructive than interesting has just been issued by Doubleday, Page & Co., under the title of "Inventors at Work," by George Iles. It opens the doors to a most entertaining description of inventions in every sphere of progress.

The first part of the book is devoted to actual inventions. The old one-piece solid wheel is taken as a beginning and the improvements are outlined as the wheel became the ball-bearing article of the present time.

The reasons for many contrivances are also explained. The advantages of the arch in construction, the greater efficiency of hollow supports, bridge construction, railway locomotives, are all traced through their various stages of improvement.

In fact the scope of the work is unlimited along this side. Every phase of mechanics and practical science is considered. To a man with a mechanical turn of mind it will prove of absorbing interest.

Of equal interest with the inventions is the description of the inventors themselves, how they work, whence spring their ideas, and how they pursue their inquiries. No fiction holds the reader more strongly than the story of Newton and Watt and Edison. Mr. Iles has produced a book which should find its way to the desk of manufacturers.

Additional Vessels for Canadian Trade.

Three new steamers will be added to the C. P. R. fleet during the coming summer. Two of the boats will be used in the lake traffic. They will be in commission in time to handle next season's western grain. One freighter will be used in the coast trade of British Columbia. The lake vessels will be of about double the capacity of the boats now in use.

AMONG THE INDUSTRIES

Suitable exchanges of property having been made the amalgamated Screw and Tack works will now definitely remain in Hamilton.

Through the courtesy of the management of the Canadian Westinghouse Company, Limited, the students of the Normal College, Hamilton, were enabled to see how a modern manufacturing plant is conducted. The students spent a whole afternoon in the factory and were shown through every department of the works. Motors were exhibited in every stage of construction. The insulating room and the electrical fixture department were especially interesting. A most profitable time was spent under the guidance of the company's officers.

The Atikokan Iron Company, Limited, of Port Arthur, has almost completed the construction of a blast furnace plant for the reduction of iron ores. The construction work has been in progress now for about twelve months. It is expected that when the plant is in full operation it will turn out 150 tons of pig iron in twenty-four hours.

In connection with the proposed enlargement of the Grand Trunk shops in Stratford a number of prominent constructing engineers have been looking over the ground recently and it is expected that building operations will be begun as soon as the weather permits. It is now thought that the shops will be reconstructed along the lines of the shops in Battle Creek, Mich.

The Canadian Westinghouse Company will build a large extension to their already big plant at Hamilton during the coming summer. When the original building was erected it was designed so as to permit of extensions without interfering with the portion already in operation.

The citizens of Almonte, Ont., are making strong efforts to secure the International Veneer and Lumber Company for their town.

The Diamond Plumbago Mines near Buckingham, P. Q., are being developed energetically. The company's mill has just been fitted with a new equipment which will treat 100 tons of ore a day.

The Cline Furniture Company, of Stratford, have under consideration at the present time extensive additions to their factory. A new building will be erected close to the present structure.

Another new industry has been established in Victoria, B. C. The Newton and Greer Paint Company has been formed by S. R. Newton, formerly manager of the Melrose Company, for the manufacture of a special line of waterproof and fire-proof paints, mixed under a patent process.

E. Leonard and Sons, London, are preparing to build an addition to their plant.

A new flour mill and elevator will be built at Pictou, N.S., immediately. Mr. James W. Smith, of Durham, has bought the necessary site, and will proceed with the erection of buildings.

It is announced from Sydney, N.S., that large flour mills will be erected there, as a complement to the elevators which are to be built.

Parry Sound is being favorably considered as the site of a smelter. Mr. H. Moggly, manager of a smelter in Rapid City, Dakota, has signified his intention of building one for the reduction of cobalt and nickel ores.

The Commercial Cement Company, of Carman, Man., are now installing their machinery. It is expected that the plant will be ready for operation as soon as the spring opens up.

A company has been organized in Welland, Ont., for the manufacture of wood fibre wall plaster and cement tile. John A. Reed, of Port Colborne, and W. J. Sommerville, of Welland, are conducting the business.

The Majestic Wire Fencing Company, of Detroit, will establish a Canadian Branch during the present year. Victoria, B. C., has been chosen as the site, and a $40,000 building will be erected.

The Miller Reversible Gasoline Engine Company, of Toronto, have removed from Sherbourne Street to 569 Yonge Street.

Application has been made by the King Radiator Company, Montreal, for a tract of 3 acres of land and 11 acres of water in Ashbridge's Bay, Toronto, such tract to be used as the site of works for the manufacture of radiators and furnaces. The company would expend $200,000 on buildings.

The Ontario Iron and Steel Company's plant, which has been under construction for some months at Welland, is being built on a larger scale than the company's agreement with the town called for. It will cost $300,000, will employ about 500 men and is expected to be ready for operation by June 1st.

Towns in the Niagara District are competing keenly for the works the North American Mining and Refining Company proposes to build in that part of Ontario. Thorold, Niagara Falls, St. Catharines, Port Dalhousie, Merritton and Welland are all negotiating for the new enterprise, which is to work upon ore from the Cobalt mineral field.

The Dominion Sewer Pipe Company will erect a factory in Hamilton for the manufacture of sewer pipes, flue linings, gutter pipe and wall coping.

The Sydney Cement Company will enlarge their plant this year. They are situated on ground owned by the Dominion Iron and Steel Company, and their cement is made from slag procured from the Steel Company's furnaces.

The Shedrick Rigby Company have been incorporated in Montreal, with a capital of $20,000. They will manufacture machinery, electric appliances, etc.

The Gibson Manufacturing Company, Limited, Guelph, who have just been incorporated with a capital of $50,000, will manufacture gasoline engines.

The contract has been let for the construction of the new Intercolonial locomotive shops at Moncton, N. B., to replace the ones destroyed by fire last year. The cost will run up to about half a million dollars. The buildings will be of concrete and steel.

Although additions to their buildings have just been completed by the Canada Foundry Company and the Canadian General Electric Company, both at Toronto and Peterborough, further additions are now found to be necessary and building operations will be resumed at both places this summer.

The Munro Wire Works, Winnipeg, have erected a $30,000 building to meet the growing demands for their goods. The new building will be devoted to the manufacture of wire mattresses.

The capital stock of the Canadian Iron Wool Company, Limited, has been increased from $10,000 to $50,000.

The Northwestern Brass Company, of Winnipeg, will erect a building at a cost of $40,000. It will be a steel structure, 80 x 100 feet.

The National Car Company will establish a plant at Whitby. They will build cars for electric railways. A liberal bonus was granted by the town.

The Waterous Engine Works, of Brantford, will build an addition to their plant this year.

It has been announced that the Winton Automobile Company will establish a branch factory in Toronto.

Work will commence at once on the Meisel Manufacturing Company's new plant at Port Arthur. The contracts have been already let.

Representative E. Billings, of the Spencer Co., of Hartford, Conn., the largest manufacturer of drop forgings in the United States has signed an agreement with the Town Council of Welland, to locate there. Their Canadian branch will be called the Canadian Billings & Spencer Company, Limited. Plans for a plant to cost about a hundred thousand dollars will be prepared at once.

The St. Thomas Packing Company, Limited, have completed their organization, with a capital of $50,000. The erection of the buildings will be begun at an early date.

The Crandall Cutlery Company, of Pennsylvania, are considering the advisability of establishing a branch factory in Canada. Their representative has been in Dundas investigating the possibilities there.

The plant of the Taylor and McKenzie Company, manufacturing machinists, has been moved to Sussex, N.B., where a larger factory building has been secured.

Contracts have been let for the construction of a cement plant in Montreal, which will be one of the largest of its kind on the continent. A site has been secured and building operations will commence at once. The plant will be operated by the Fordwick Company, who represent the same interests as those controlling the Shawinigan Falls Power Company. The initial capacity will be 2,500 barrels a day. The project will cost $1,000,000, and will be completed by next August.

A company has been formed in Lethbridge, to manufacture automobiles. The cars will be built after a model designed by Mr. H. Case.

A new bag factory has been opened in Kemptville under the management of D. F. Stein. It has a capacity of 1,000 bags per day.

The Kurtze & McLean Co., Limited, propose taking over the factory building erected for the Dominion Thread Mills in Stratford. They are at present manufacturing acetylene plants at St. Williams, but are in need of a large plant and more central location.

A company has been organized in Hamilton to manufacture a high grade of balbriggan underwear. Adam Zimmerman, M.P., S. C. Mewburn, A. F. Zimmerman, and C. S. Scott are the names mentioned in connection with it. The company will have a capital of $300,000. Two managers of a similar factory in Massachusetts have been secured to superintend the work.

A company has been formed of prominent Montreal and Toronto capitalists to acquire or build ships, barges, etc., and to carry on business as shipowners, etc., under the name of the North Atlantic Dock and Shipbuilding Company. The headquarters are at Montreal and the capital $500,000.

At a meeting of the North American Cobalt Co., Limited, held in Hamilton recently, the decision of the directors to locate their smelter in Thorold was confirmed.

A company has been organized in Winnipeg to manufacture and deal in stoves and heating systems. The authorized capital is $40,000. The company will be known as "The Wingold Stove Company, Limited."

The Algoma Bridge Company, a branch of a big United States consolidated company, has been organized, and a plant will be established at Sault Ste. Marie. A. W. Hillier is to be manager. A plant to employ 100 men will be erected.

The Canadian Glass Manufacturing Company's plant at Point St. Charles, P.Q., was burnt recently. The plant was a total loss. The damage amounted to about $35,000.

Mr. J. Muirhead has successfully floated a $100,000 company for the establishment of a 200-barrel flour and 200-barrel oatmeal mill in Port Arthur. The capital has all been subscribed locally, and the site has been secured on the C.P.R. side track, on North Water Street. The mill will be of fire-proof construction, and ready for the present year's crop.

Another important industry to be established in Port Arthur is a factory for the manufacture of automobiles and bicycles. Messrs. McKinnon Bros., have launched the industry and have secured a site at the corner of Court and Pearl Streets. Construction will commence as soon as the weather will permit. This building will be of fire-proof construction.

The Dominion Radiator Co., Toronto, has taken out a permit for the erection of a plant to cost $160,000. There will be four brick buildings, a story and a half, to cover a large area, at the corner of Dufferin and Van Horne Streets.

The Manitoba Linseed Oil Mills, Limited, has been incorporated with a capital of $200,000, and has purchased a site in Winnipeg. They will commence building operations in the early spring, and intend erecting a thoroughly well-equipped and up-to-date plant for the manufacture of raw and boiled linseed oil and refined varnish oils. It is intended to have the plant in operation to handle the crop of 1907.

Extensive additions have been made to the plant of Rhodes, Curry & Company, of Sydney, C.B. During the coming months it is intended that many further improvements shall be made.

The Mount Royal Spinning Company, Limited, has been organized in Montreal with a capital of $1,500,000, to manufacture cotton goods. Work on the new factory in Montreal will be started at once, and when completed it will contain 40,000 spindles and employ 800 hands.

The Standard Paint Company, Limited, has opened a Canadian factory at Montreal where car roofing, ruberoid roofing, P. and B. products, building, sheathing and insulating papers, electric paint, electric tape, etc., will be manufactured.

The Gorham Company, Limited, whose factory was recently destroyed by fire, are erecting much finer premises on Phillips' Square, Montreal.

A. C. Leslie & Company, have added to their business a department to handle fireclay goods and chemicals, of which they will carry a large assortment.

The Saskatchewan Automobile and Gasoline Engine Company is the name of a new Prince Albert Company.

The Magdalene Islands Development Company, Limited, will establish cold storage warehouses in Pictou, N.S.

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the name of enquirers, apply by number to the Secretary, of Toronto.

203 **Apples.**—A **London, England,** fruit merchant would like to be placed in touch with some responsible firm in Canada who would obtain consignments of apples and other produce upon his behalf.

204 **Apples.**—A firm in **Amsterdam, Holland,** who are large buyers of sun-dried apples, wish to get into communication with Canadian firms who can ship regular supplies. Barrels of 120 kilos preferred.

205. **Apples.**—Enquiry is made by a **Durham, England,** firm of fruit merchants for shippers of Canadian apples to meet demand of 50 to 100 barrels a week, on commission.

206 **Apples.**—A **North of England** fruit importing firm is desirous of hearing from Canadian apple shippers in a position to supply them with 300 barrels a week next season. Terms, either on commission or buy outright.

207 **Apples.**—A well-known **Durham, England,** importer of foreign produce is anxious to get into touch with reliable Canadian packers of apples for supplying 500 barrels a week next season. Bank and other references furnished.

208 **Bacon, Butter and Cheese.**—A produce importing firm in the **North of England** is open for negotiations from Canadian shippers of bacon, butter and cheese for direct shipments.

209 **Bedsteads.**—A **Manchester, England,** firm asks for prices of double and single bedsteads, French design, in fumed oak and polished maple, from Canadian manufacturers.

210 **Birch Squares.**—A **Liverpool, England,** firm asks for prices c.i.f. of birch squares clear stock in sizes 1-inch x 1-inch and 1¼-inch x 1¼-inch and 13 inches long and multiples, from Canadian exporters.

211 **Broom and Shovel Handles.**—A **Liverpool, England,** firm with first-class connections is open to receive large shipments of broom and shovel handles from Canadian firms.

212 **Casein.**—A **Manchester, England,** firm asks for samples and prices of casein from Canadian exporters.

213 **Chair Legs and Spindles.**—A **Manchester, England,** firm asks for prices of chair legs and spindles from Canadian manufacturers.

214 **Collapsible Tin or Lead Tubes, Fish Glue.**—A domestic firm is open to buy collapsible tin or lead tubes and liquid fish glue in bulk.

215 **Condensed Milk.**—A firm in **Newfoundland** desires to be placed in communication with exporters of condensed milk from Canada who are not already represented in that colony.

216 **Corundum, Moss Litter, etc.**—A commercial agency in **Amsterdam, Holland,** has enquiries for corundum and large quantities of moss litter, from Canadian exporters.

217 **Cotton Duck.**—A **Cleveland, Ohio,** firm desires to get into communication with cotton duck manufacturers in Canada.

218 **Dried Vegetables.**—A **Warwick, England,** house is open to buy ton lots of fine ground dried tomatoes, tomato purée, and dried onions in fine powder. Bank references furnished and payment monthly.

219 **Elastic Pulp Plaster.**—A firm in **New England** desires to communicate with manufacturers in Canada of reliable brands of elastic pulp plaster, not already represented in that colony; correspondents to state cost per ton c.i.f. Auckland and terms of agency for colony.

220 **Glass Bottles.**—A **Mexican** house asks for milk and beer bottle manufacturers in Eastern Canada.

221 **Hay.**—A hay importing firm with large connections extending from **Leeds** to **Newcastle-on-Tyne** desires communications from Canadian shippers who can send them really good selected hay in large shipments.

222 **Hay.**—A **Yorkshire, England,** firm of hay merchants asks for prices from Canadian shippers of hay in 20 to 30 ton shipments.

223 **Hay.**—A **Manchester, England,** firm asks for prices c.i.f. of baled timothy and clover-mixed hay from Canadian exporters of same.

224 **Hay.**—Large firm of forage contractors in **Durham, England,** are open to entertain prices from Canadian shippers of clover, timothy and other classes of hay to meet probable large demand caused by scarcity of home supplies. Shipments to be quoted c.i.f. either Hull, Newcastle-on-Tyne or Liverpool.

225 **Hog Products, etc.**—A **Durham, England,** well-known produce firm desires to enter into negotiations with Canadian exporters of hog products, cheese and canned goods, enquirants are prepared to consider prices only from Canadian shippers not represented in Britain.

226 **Leather.**—A **Manchester, England,** firm now buying in the United States asks for prices and description of leather and leather belting from Canadian manufacturers.

227 **Nails and Screws.**—An old established firm of wholesalers in **London, England,** is in the market to buy nails, all kinds, bolts and nuts, barbedwire, galvanized strand files, screws and other goods saleable among ironmongers and engineers.

228 **Oatmeal.**—A **Durham, England,** firm makes enquiry for shipments of Canadian oatmeal direct from actual producers, and asks for prices.

229 **Pickled Beef Tongues.**—A **Manchester, England,** firm asks for prices of pickled beef tongues in barrels from Canadian exporters of same.

230 **Pit Props.**—A firm of timber importers supplying large quantities of colliery pit props to Durham, England, colleries, asks Canadian shippers to state their lowest prices for shipments to **West Hartlepool** at random sizes.

231 **Pound or Waste Cotton.**—A **Newfoundland** dealer in dry goods asks to be put in communication with mills or factories in Canada having pound or waste cottons to dispose of.

232 **Provisions.**—A **Montserrat, B. W. I.,** dealer enquires for Canadian exporters of provisions, tinned meats, etc.

233 **Ready-made Clothing.**—A **Mexican** house is desirous of doing business with Canadian manufacturers of ready-made and made to order clothing for men, women and children.

234 **Refrigerating Machinery.**—An **Ontario** firm enquires for manufacturers of refrigerating machinery.

235 **Rivetted Pipe.**—An **Ontario** firm wish to purchase a quantity of steel or iron spiral rivetted pipe about No. 8 guage.

236 **Rock Maple Squares.**—A **Liverpool, England,** firm of bobbin manufacturers asks for prices c.i.f. Liverpool of rock maple squares, must be clear stock, free from knots, etc., sizes 1½-inch x 1½-inch to 3-inch x 3-inch and 27 inches long multiples from Canadian exporters of same.

327 **Salmon.**—A large **Leeds, England,** fish merchant makes urgent enquiry for Canadian shippers of salmon (either frozen or fresh), for direct consignment to Leeds. "Loger-brands" preferred, satisfactory financial arrangements made.

238 **Scythes and Cradles.**—A New York firm with a first-class connection in South Africa desires to get into communication with Canadian manufacturers of scythes and cradles with a view of placing orders for shipment to South Africa.

239 **Shovel Handles.**—A **New York** house with branches in every large city in the world is in the market to buy carload lots of shovel handles for shipment to England.

240 **Silicate of Soda Syrup.**—A **Montreal** firm enquires for firms producing this material.

241 **Spruce Deals, etc.**—A **Manchester, England,** firm asks for prices of spruce deals, scantlings and boards from Canadian exporters.

242 **Staves.**—A **South African** firm of coopers desires to get into communication with Canadian exporters of staves.

243 **Steel Billets.**—A **Manchester, England,** firm asks for prices c.i.f. of steel billets from Canadian manufacturers.

244 **Sulphide Woodpulp Board.**—A **London, England,** firm with a large connection can use great quantities of sulphide wood pulp board. Sample can be had at this office.

245 **Tobacco.**—A **London, England,** wholesale dealer in tobacco desires to establish a connection with exporters of Canadian tobacco.

246 **Waste or Scrap Mica.**—A **London, England,** house is in the market to buy 100 tons per annum of waste or scrap mica and will pay £13 per ton c.i.f. London. Mica must be white and in a crushed condition about 160 mesh.

247 **Wooden Taps.**—A **Birmingham, England,** firm is prepared buy large quantities (10,000 at a time) of wooden taps and asks quotations. Samples may be secured from this office.

YOUR BUSINESS FUTURE may depend on the VALIDITY of your FIRE INSURANCE before to-morrow. HAVE YOU given this the ATTENTION that PRUDENCE DEMANDS? WE remove the LABOR and WORRY from YOUR OFFICE and it COSTS YOU NOTHING. We will be glad to tell you HOW and WHY.

IRISH & MAULSON

INSURANCE BROKERS

Traders Bank Bldg., Toronto

We Pay Telephone and Telegraph Messages

The

ADVERTISEMENTS

Grow in Proportion to the Results

The News record shows clearly that the circulation of this paper is distributed among people in Toronto and throughout Canada who can afford to buy what is advertised—This is what the merchant is looking for—He is anxious to sell his goods — NEWS readers have the money to buy.

40,000

Daily subscribers mean fully 120,000 readers of your advertisement. The table below shows how well the advertiser appreciates the value of The News Circulation.

ADVERTISING CARRIED BY

THE NEWS

	1905		1906		Increase
October	323,395	Lines	382,864	Lines	59,469
Nov.	357,703	"	436,113	"	78,410
Dec.	390,284	"	454,167	"	63,883
	1906		1907		
January	288,502	"	366,592	"	78,090
	1,359,884	"	1,639,736	"	279,852

ADVERTISING IS ACCEPTED AT

A FLAT RATE

JUDGE BY RESULTS



By Royal Warrant

"Canadian Club" Whisky

Fully Ripened in Wood. Age Guaranteed by Government.

QUALITY UNEXCELLED

Distilled and Bottled by

HIRAM WALKER & SONS

LIMITED

Walkerville, Canada

LONDON CHICAGO NEW YORK MEXICO CITY VICTORIA, B.C.

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HAND CARS - PUSH CARS

TRACK SCALES

BAGGAGE SCALES STOCK SCALES

SCREW JACKS RATCHET JACKS

BALL BEARING JACKS

TRACK DRILLS WRECKING INCLINES

SEMAPHORE AND SWITCH STANDS

A full line of specialties made by **BUDA FOUNDRY AND MFG. CO.**
carried in stock by

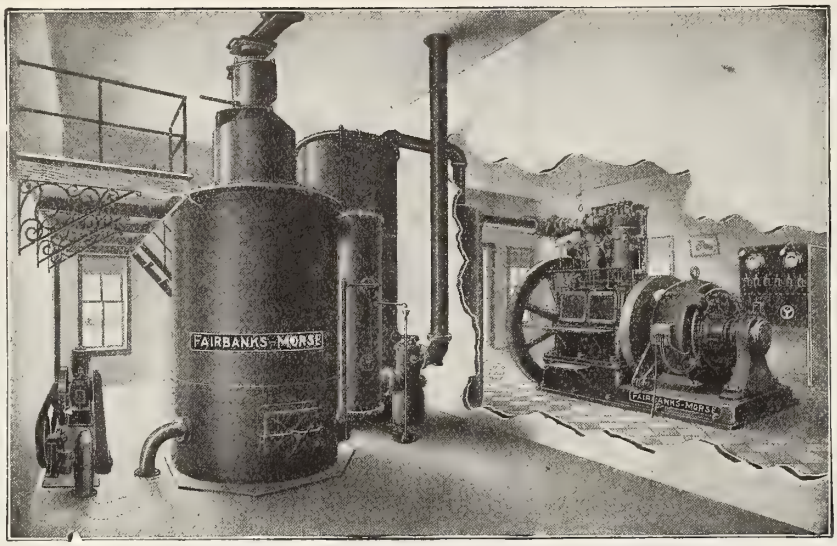
CANADA FOUNDRY CO.

LIMITED

Head Office and Works: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland

Every Manufacturer and User of Power



Should write us for full information re

Fairbanks-Morse Gas, Gasoline and Suction Gas Plants

Our line is more complete than that of any other Engine Manufacturer.

Our Engine Design and Construction are so totally different and so far in advance of other manufacturers, that we are recognized as leaders, and our Engines as Standard, and are in a CLASS BY OURSELVES.

WRITE FOR PAMPHLETS AND FULL INFORMATION

THE CANADIAN FAIRBANKS COMPANY, LIMITED

MONTREAL - TORONTO - WINNIPEG - VANCOUVER



WHY NOT STOCK PENBERTHY GOODS?

Mr. Dealer: You should consider this question.

Good Goods are always in demand. Be prepared for your trade and don't send them next door. Put in that Stock Order for Penberthy Brasses and note your increase in orders. A store that can supply the best is the one generally patronized. WRITE FOR OUR NEW CATALOGUE

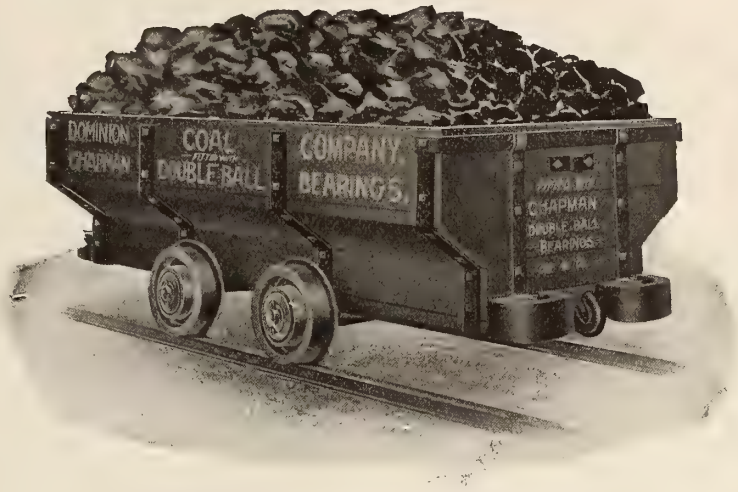
PENBERTHY INJECTOR CO., Limited. **WINDSOR, ONT.**

Chapman Double Ball Bearings

APPLIED TO

Coal
Ore
Slag
Charging
Quarry
Marl
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Foundry

CARS



SAVE

50 % Power to operate.

100 % Wear and Tear on Axles.

100 % Lubrication.

100 % Attention.

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THE CHAPMAN DOUBLE BALL BEARING CO. OF CANADA, Limited

TORONTO, - CANADA.

EXPANDED METAL



No. 2 Colliery, Dominion Coal Co., Glace Bay.
Walls, Roofs and Floors by Expanded Metal System.

STANDARD FOR
FIREPROOF CONSTRUCTION
AND ENGINEERING
CONCRETE REINFORCEMENT.

ECONOMY - STRENGTH.

GET OUR QUOTATIONS
AND PRICES.

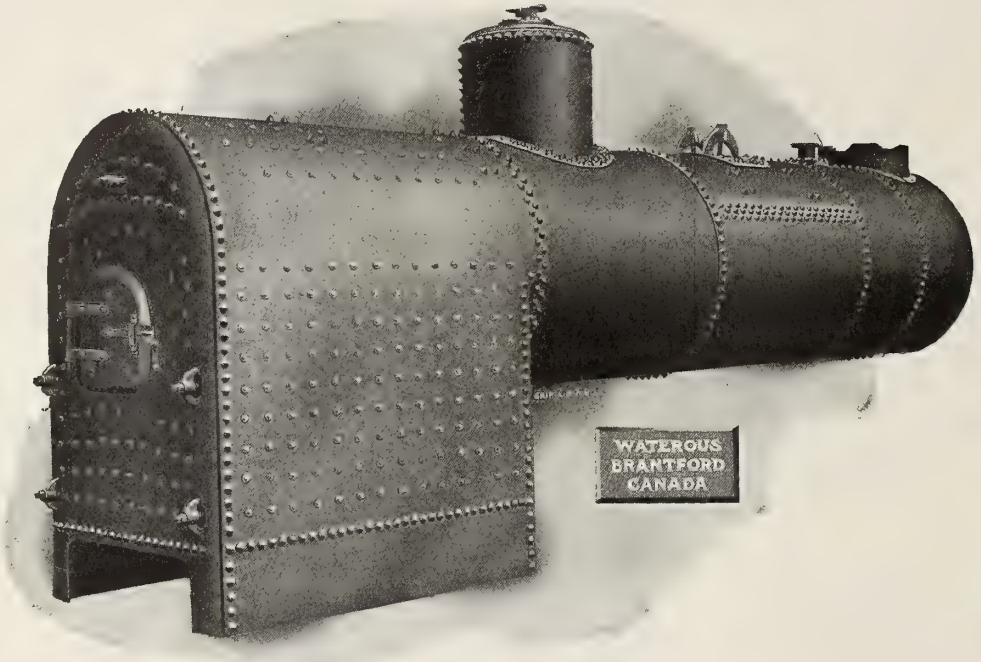
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Floors Ceilings
Roofs Columns
Partitions Sidewalks
BRIDGES, Etc.

EXPANDED METAL AND FIREPROOFING CO., Limited

100 KING STREET WEST - TORONTO.

The Waterous Engine Works Co., Ltd.



We Manufacture

Boilers of different styles.

Engines—Plain and Automatic.

Saw Mill and Pulp Mill Machinery.

Road Making Machinery.

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WRITE US FOR PRICES AND PARTICULARS.

LOCOMOTIVE BOILER
BEST STYLE OF BOILER FOR PORTABLE SAW MILL WORK.

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Manufacturers in Iron and Steel

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All descriptions of special machinery manufactured to order

Catalogues and Quotations on application

ONTARIO ST., Corner Moreau, MONTREAL

SADLER & HAWORTH

TORONTO MONTREAL

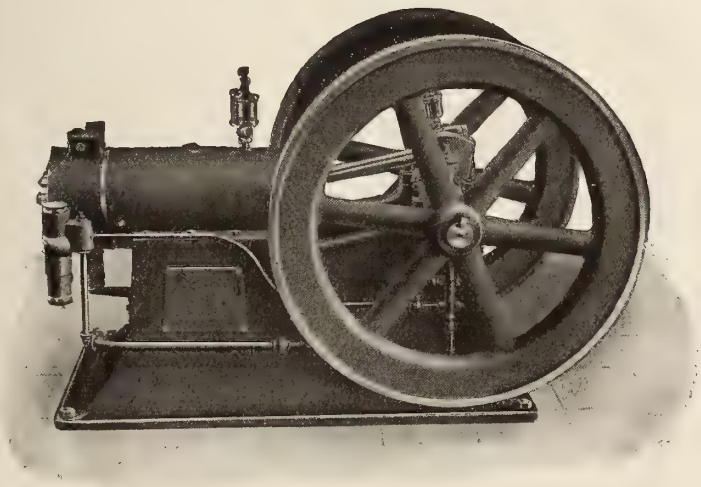
SPECIAL "CROWN BRAND"

Is an exceedingly high grade — made for extra heavy work. Each and every foot is cut from specially selected heavy leather. It will do more work, give better satisfaction, and last longer than any other belting made.

LEATHER BELTING

EFFICIENCY WITH SIMPLICITY

IS WHAT WE CLAIM



Only one-third the usual number of parts used in construction.

Perfect balance while running.

NO EXPERIENCE NEEDED TO OPERATE OUR ENGINE.

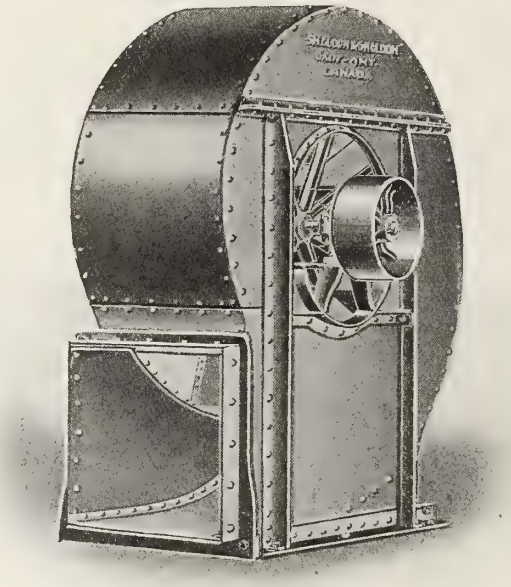
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Heating
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HEATING AND VENTILATION
by Fan System

Natural Draft and Blower Dry Kilns
For Lumber, Brick, etc.
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ENGINES

both Vertical and Horizontal.

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Mills at Merritton, Ont., Hawkesbury, Ont.

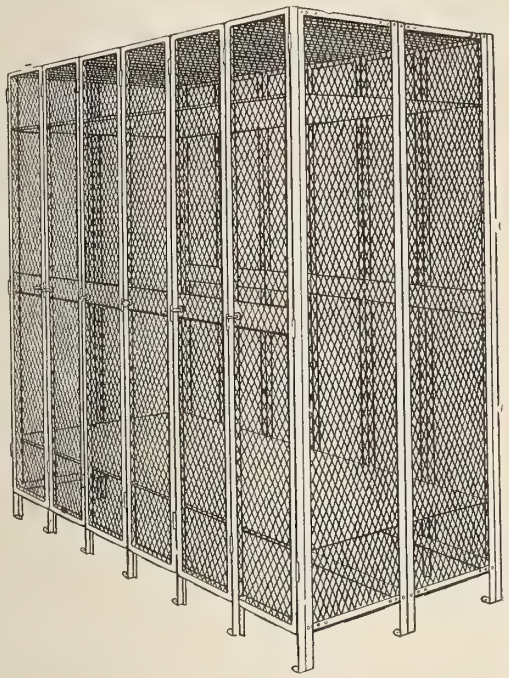
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News Paper, Hanging Paper,
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lines of Building Paper.
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Sulphite Fibre Wood Pulp in
the British Dominions.



¶ It is the aim of The Dunlop Company to extend the trade mark, the two hands, into as many branches of the rubber making industry as are open to exploitation. Following this line of progress we have pleasure in announcing the near completion of an extensive addition to our factory for the making of every grade of rubber hose, wire wound and plain. While our stock lines will include rubber hose for every general purpose, special lines will also be made up, as ordered, to fill any particular specification.

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Every up-to-date factory counts a proper LOCKER SYSTEM a necessity, it saves money.

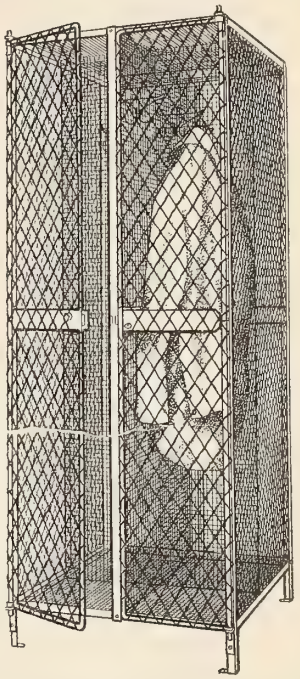


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The
Geo. B. Meadows

TORONTO WIRE, IRON AND BRASS WORKS COMPANY, LIMITED,

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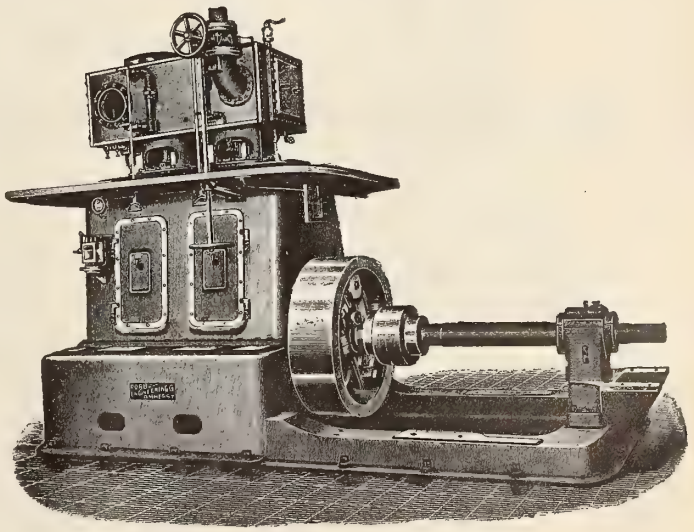


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We are prepared to supply high speed vertical enclosed engines of the English type, up to 750 horse power.

The oiling system of these engines is under a pressure of 15 lbs. to the square inch ensuring a copious supply of oil to all bearings.

They have Robb-Armstrong automatic governors and Sweet balanced valves giving the best regulation and highest economy.



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THE STEEL RAIL MILL OF

The Algoma Steel Co., Limited, Sault Ste. Marie, Ont.

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A.S.C.E. STANDARD SECTION **Steel Rails** OF HIGHEST QUALITY

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If NOT you are BURNING MONEY

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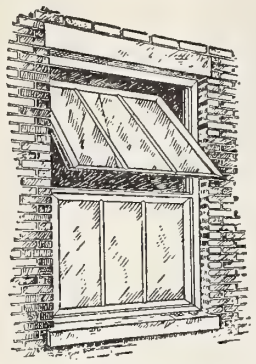
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FIREPROOF WINDOWS, DOORS & SKYLIGHTS

THEY PROTECT FROM FIRE ALWAYS

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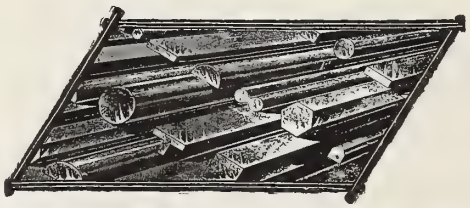
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Not only protects it from the **FIRE** in a neighboring building but **REDUCES** your **INSURANCE** rate from **40**% to **70**%

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It will be checked before it gains headway. Insurance Companies think so much of them that they give reduced rates where the Manufacturers is on guard.

Particulars cheerfully furnished.

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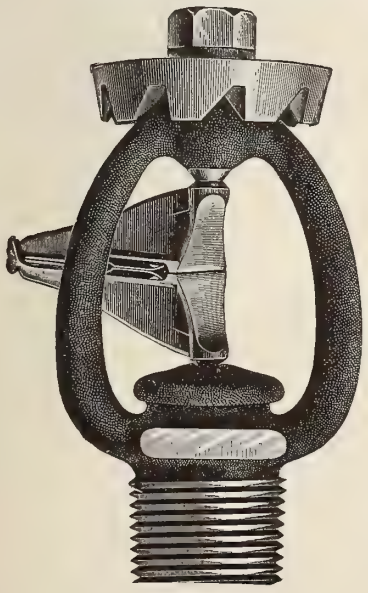
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Montreal, P.Q. . .



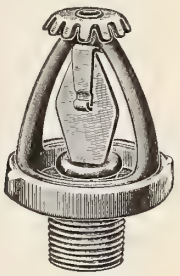
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Esty Automatic Fire Sprinkler.

It will cut your insurance premium in half and protect you against loss by fire

Write for particulars

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The Original the Best

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Agents for Canada

INSTAL WET OR DRY SYSTEMS OF

AUTOMATIC FIRE EXTINGUISHING APPARATUS . . .

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The CANADIAN DRAWN STEEL CO., LTD.

HAMILTON, CANADA

COLD-DRAWN AND DIE-ROLLED STEEL

ROUNDS, SQUARES, HEXAGONS AND FLATS

WIRE ROPE

GREENING

ALL KINDS AND SIZES AND FOR ALL PURPOSES

Standard and Lang's Patent Lay

PRICES RIGHT. Rope Fittings—Rope Grease. PROMPT SHIPMENTS

THE B. GREENING WIRE CO., Limited

HAMILTON, ONT. - - - - - - MONTREAL, QUE.

DOMINION BRIDGE CO., LTD., MONTREAL, P.Q.

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TURNTABLES, ROOF TRUSSES
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Structural METAL WORK of all kinds

BEAMS, CHANNELS, ANGLES, PLATES, ETC., IN STOCK

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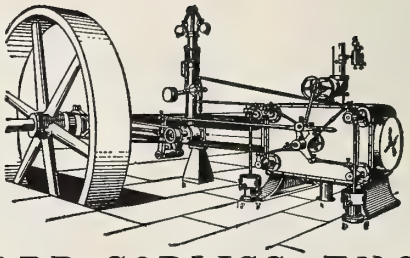
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Standard and Heavy Duty. Peerless Self-Oiling and Leonard Automatics for Electrical and Manufacturing purposes. Standard Return and Water Tube Boilers, all sizes. Open and Closed Exhaust Steam Heaters, Pumps, etc., for complete Steam Plants.

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MANUFACTURERS OF HIGHEST QUALITY CHEMICALS

Sulphuric, Muriatic, and Nitric Acids, Glauber's Salt, Salt Cake, Mixed Acid for DYNAMITE MAKERS, Etc.

Agents for STAR and TRIANGLE BRANDS
BLUE VITRIOL

Purest and Strongest
PAPERMAKERS' ALUM

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ELECTRIC LIGHT and POWER CABLES

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The Wire & Cable Company, Montreal

SPECIAL

When Buying

PAINTS OR
VARNISHES
STAINS
ALUMINUM
ENAMELS

or Special Paints for Special Purposes

Write to

THE CANADA PAINT CO'Y LTD.

MONTREAL, TORONTO, WINNIPEG



POLSON IRON WORKS
LIMITED

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STEEL SHIPBUILDERS, ENGINEERS
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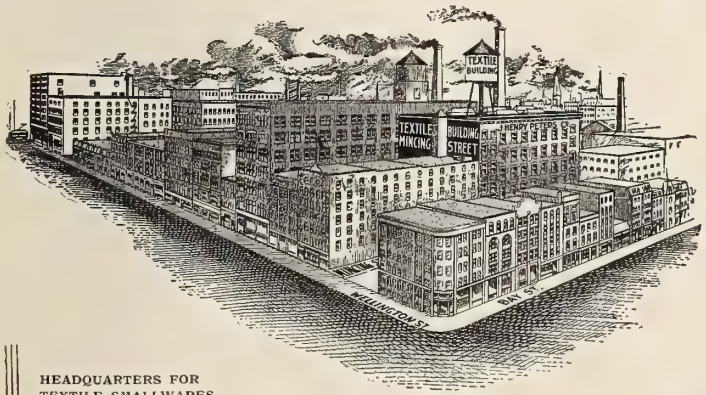
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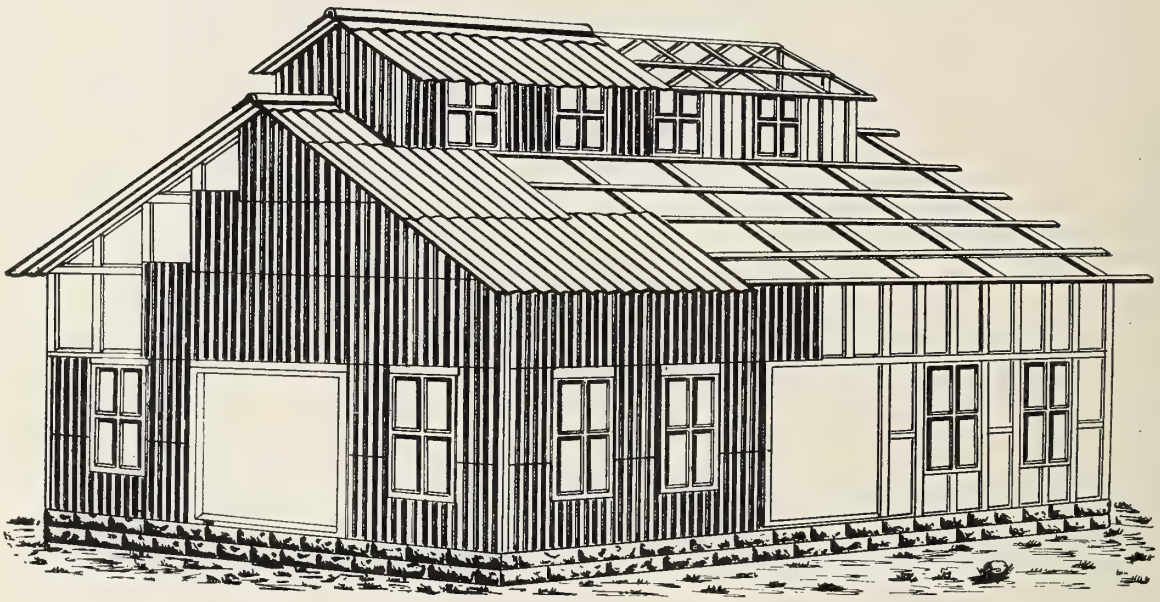
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EXECUTIVE COUNCIL

THE FEBRUARY MEETING.

The February meeting of the Executive Council was held in the Committee room of the Board of Trade Building, Toronto, on Thursday, February 21, 1907, at 2 p. m.

The President, Mr. Harry Cockshutt, occupied the chair and there were also present:- Messrs G. Frank Beer, Toronto; H. Bertram, Dundas; Geo. Booth, Toronto; Geo. Brigden, Toronto; P. H. Burton, Toronto; J. C. Casavant, St. Hyacinthe; J. A. Coulter, Ingersoll; John Dick, Toronto; L. V. Dusseau, Toronto; J. F. Ellis, Toronto; P. W. Ellis, Toronto; Thos. Findley, Toronto; H. W. Fleury, Aurora; Geo. Forbes, Hespeler; E. J. Freyseng, Toronto; W. K. George, Toronto; W. P. Gundy, Toronto; S. Harris, Toronto; S. R. Hart, Toronto; E. G. Henderson, Windsor; J. Hewton, Kingston; J. B. MacLean, Toronto; R. McLaughlin, Oshawa; Jas. Maxwell, St. Marys; Chas S. Meek, Toronto; Jas. P. Murray, Toronto; W. C. Phillips, Toronto; John Ransford, Clinton; Carl Riordon, Merritton; Wm. Robins, Walkerville; Thos. Roden, Toronto; A. S. Rogers, Toronto; Alex Saunders, Goderich; Wm. Smaill, Montreal; R. L. Torrance, Guelph; Geo. W. Watts, Toronto; S. M. Wickett, Toronto; C. C. I. Wilson, Ingersoll; Dan. Wilson, Collingwood.

The minutes of the meeting held on January 17th, as published in "Industrial Canada" were taken as read.

COMMUNICATIONS.

Communications were received as follows:

(a) From the following members of the Council regretting their inability to be present: Messrs. Louis Simpson, T. J. Storey, J. T. Sheridan, C. C. Ballantyne, S. W. Ewing, J. Davidson, C. H. Waterous, Denis Murphy, D. J. Fraser.

(b) From Mr. Denis Murphy extending an invitation on behalf of the manufacturers of Ottawa to the Executive Council to hold a meeting in that city before the close of the present session of Parliament. This communication was referred to the Reception and Membership Committee for report.

(c) From the Montreal Branch recommending the appointment of Mr. D. Lorne McGibbon and Mr. W. H. Wyman to the Executive Council in the place of Mr. F. H. Wilson and Mr. Jas. Redmond, resigned. This recommendation was approved.

(d) From Mr. Geo. Hadrill, Secretary of the Montreal Corn Exchange, inviting assistance from the Association in securing from the Railway Commission a ruling that would bind railways to make good any losses sustained by receivers of grain on account of delay in supplying cars or hauling same when loaded. This letter was referred to the Railway and Transportation Committee.

(e) From Mr. W. K. George, forwarding the Association two portraits of the Right Honorable Joseph Chamberlain, which had been sent in his care by Mr. Alfred Mosely, C.M.G. Mr. George's suggestion that separate acknowledgements of the receipt of these portraits be sent, one from Toronto, and one from Montreal, was approved of.

The reports of officers and committees were then presented as follows:

PRESIDENT.

The President referred to the meeting of the Executive Council which had been held in Montreal last month, and stated that those who went from Ontario all considered themselves under deep obligations to the Montreal members for the splendid entertainment provided for them.

SECRETARY.

The Secretary took occasion to thank the members of the Council for the confidence they had shown in him in appointing him to the secretaryship, and expressed the hope that the same assitance which had been given his predecessor by those who had served so faithfully on committees, would be accorded to himself.

TREASURER.

The Treasurer, Mr. George Booth, presented a statement showing the condition of the Association's finances at the end of January, the balance reported, $19,318.51, being the largest in the history of the Association. This report was received with satisfatcion.

FINANCE.

Mr. J. F. Ellis presented the report of the Finance Committee, which recommended for payment the accounts of the month, amounting in all to $1,797.80.

The report further stated that the position of Assistant-Secretary had been given to Mr. Hugh D. Scully at a salary of $900 per year.

The adoption of the report, moved by Mr. Ellis, seconded by Mr. Henderson, was carried.

TECHNICAL EDUCATION.

The report of the Technical Education Committee was read by the Chairman, Mr. S. Morley Wickett. It first dealt with the long campaign which the Committee had carried on with a view to having the Government appoint a Commission of Enquiry, and stated that an interview would be had with certain members of the Cabinet the following day, when another effort would be made to present the case in as strong a manner as possible.

It was the intention of the Committee to visit the Toronto Technical School at an early date with a view to seeing in what way the usefulnes of that institution might be increased, from the mansfacturer's standpoint.

The Committee had under advisement the question of improving the facilities for teaching English to foreigners. They were also investigating the kind of books purchased by public libraries. It was felt that much of the trashy fiction at present purchased could be replaced with advantage by books on trade and industrial subjects.

The adoption of the report, moved by Mr. Wickett, seconded by Mr. Hewton, was carried.

COMMERCIAL INTELLIGENCE.

In the absence of the Chairman, the report of the Commercial Intelligence Committee was read by Mr. J. P. Murray as follows:—

Departmental Statistics.

It will be remembered that representations were made to the Government some time ago with a view to changing the classification of imports and exports so as more nearly to

meet the requirements of industrial and commercial interests. It was thought that this should have been done when the new tariff was brought down. The Government has again been reminded of its promise to go into the matter and your Committee is now led to believe that certain changes will be adopted commencing with the new fiscal year. The Association has expressed a desire to be consulted before these changes are made effective.

Australian Preferential Tariff.

A request recently made in the House of Commons for the correspondence in the above matter brought forth the information that the Canadian Government had offered to give Australia the benefit of the British preference on everything she produced; in return Canada asked what concessions Australia would give upon fish, lumber, paper and agricultural implements, suggesting that Australia might put fish, lumber and paper on the Free List so far as Canada was concerned.

Your Committee feel that all Canadian industries should share in the benefits of any preferential arrangement entered into with Australia, and would recommend that representations be at once made to the Government along that line.

Manufacturers Not Filling Export Orders.

A communication was received from Mr. J. S. Larke complaining that the reputation of Canadian Manufacturers in Australia was being injuriously affected through their inability to fill orders promptly. The Secretary was instructed to express to Mr. Larke the Association's regret that some manufacturers had found it impossible to keep up with their orders; that their failure to do so was not due to indifference as shown by the remarkable manner in which the export of manufactured goods had increased in the past few years, and to assure him that in future the Association would try to be more discriminating in soliciting orders from abroad.

Foreign Agents of Canadian Houses.

It has been called to the attention of the Committee that much time is lost by Canadian Commercial Agents and Correspondents of the Association in handling trade enquiries through their not being supplied with a list of the agents of Canadian houses in their territory. Your Committee would recommend that this information be immediately acquired from the members by circular; that it be transferred to a card index system and kept up-to-date, and that every correspondent be supplied with a list of the agents in his territory.

Stamped Envelopes.

A recommendation was received from the Montreal Branch to the effect that the Government be again approached in the above matter to see if they cannot be induced to supply No. 8 envelopes instead of No. 7 as at present in use. This matter is under advisement and will be reported on at a later meeting after consulting with interested manufacturers of envelopes.

The adoption of the report, moved by Mr. Murray, seconded by Mr. Rogers, was carried.

INSURANCE COMMITTEE.

Mr. G. Frank Beer presented the report of the Insurance Committee, which stated that during the past two months the Committee had been engaged in carefully considering the policy and plans of the Department. As a result they had concluded that less attention should be given to placing of business and more to the supervision of policies and general expert advice and assistance.

The report further outlined the progress which had been made in connection with securing charters for the two mutual fire insurance companies. It was expected that a deputation would wait upon the Minister of Finance in Ottawa the following day, when it was hoped the Committee would be able to convince the Government of the reasonableness of their request.

PARLIAMENTARY COMMITTEE.

The report of the Parliamentary Committee was presented by Mr. A. S. Rogers..

It briefly reviewed the steps which had been taken to oppose the Eight-Hour Day Bill, and to support the bill designed to do away with the intervention of foreign labor agitators.

The Committee regretted that it was not yet in a position to make its final recommendations in regard to the Bill to Prevent Strikes on Public Utilities. A number of new points had recently come to light regarding which there had been little time for discussion. These would be gone over very carefully at an early date.

Ontario Legislation.

Bills had been drafted and introduced into the Ontario Legislature by Mr. McNaught, one to amend the Assessment Act, and another to provide for the better regulation of pawnbrokers. Both these bills are along the lines already approved of by the Council. Another measure had been introduced, which relieved the Stationary Engineers' Act of its principal objectionable features.

Quebec Legislation.

The above was being handled exclusively by the Legislative Committee of the Montreal Branch. Outside of the Archambault Bill, which had been withdrawn pending an investigation by a Parliamentary Committee, the only items of importance that had been considered were the amendment to the Garnishee Law and the proposed tax on Montreal packing houses. These are treated of in the report of the Montreal Branch.

The adoption of the report, moved by Mr. Rogers, seconded by Mr. Beer, was carried.

RAILWAY AND TRANSPORTATION.

In the absence of the Chairman, the report of the Railway and Transportation Committee was read by the manager of the Transportation Department. It dealt with the following matters:

Changes in Classification.

Stoves.—The Manager reported that a further conference between members of the Canadian Freight Association and members of the Canadian Stove Manufacturers was held in Toronto on February 4th, and after considerable discussion a number of reductions were decided upon. These practically give a third-class rating for stoves in less than carloads as asked for by the stove manufacturers. The matter is being followed up with the Railway Commission with a view to having it embodied in supplement No. 8 to classification No. 12 which is now before them.

Fruit Syrups.—The Department has been negotiating for some time for a reduction in the clasification of fruit syrups in carloads. The manager reported that it has been decided to give the fourth class rating asked for.

Furniture.—A reduction was also asked for in the classification of lounges. At the present time they are rated with backs off or without backs at one and a half times first class. On representation it was decided to reduce the same to first class, less than carloads.

Application was also made for a reduction in classification for bureaus, washstands and sideboards completely knocked down and boxed. The classification at present provides for these goods at first class, but this rating applies when they are finished and set up. It has been decided to reduce the classification on same when entirely taken apart and knocked down to second class, less than carloads

Dressing of Lumber in Transit.

The attention of the Department was called to the fact that a new rule was put into effect by the railways affecting dressing of lumber in transit. The change provided that the car as shipped in must be billed out to destination at the same weight as billed to stop-over points. The attention of the railways was called to this, and as a general protest had been made they decided to go back to the old arrangement and an order was issued accordingly.

Minimum weight on Furniture to the Coast.

The Department reported that the result of the negotiations with the railways for a further reduction to the basis of the classification minimum of 14,000 lbs. was submitted to a meeting of the furniture section held on the 13th inst. when it was decided to accept the rate proposed in the spirit of a compromise as suggested, with the understanding that the acceptance will not dispose of the contention for a continuance of the present rate of $1.75 with a minimum of 14,000 lbs. The railways have been so advised and we are assured that the item will be included in the new transcontinental tariff which is now in the course of preparation.

International Rates.

As previously reported the plan submitted for the adjustment of international rates to do away with the discrimination between Canadian and American shippers at the frontier was discussed and the objections of the Association were fully stated. In view of these objections a new plan has been submitted with statements, but as they were received just prior to the meeting, and as there had not been sufficient time to go into the matter, the Manager was instructed to check the same over carefully and call a meeting of the Committee at an early date.

Railway Equipment.

Your Committee begs to report that the sittings of the Railway Commission were held in Ottawa on February 5th, 6th, 7th and 8th, at which this matter was discussed, with the result that each railway company is asked for a statement respecting its rolling stock and equipment of various descriptions; this statement to be filed before March 1st, next.

It was stated in conclusion that the Board had hitherto felt a difficulty in making orders for the supply of cars or other equipment, upon specific complaints, for fear that this might result in taking from others of the public facilities to which they were equally entitled with the complainants. In view of the unprecedented activity of business the Commission hesitated to adopt a policy which would have penalized railway companies for failure to have the necessary equipment, or to be fully prepared to handle traffic with due expedition. The circumstances of the last two years should, however, serve as a warning; and the Board thinks that measures which would not have been just and reasonable under previously existing circumstances may be so in the future.

The making of large expenditures in improvements of railways and especially in building new lines, furnishes evidence of the power of railway companies in respect of financial requirements, to supply all necesary rolling stock and equipment.

The commission, therefore, feels obliged to consider carefully whether railway companies, which are extending their lines, and thereby rendering necessary a further supply of rolling stock and equipment, are justified in doing so without fully equipping the lines which they are now operating.

The Board stated that it does not desire to hold railway companies to a higher standard than seems reasonable; but it proposes, in the future, to adopt all means within its power to make railway companies live up to a reasonable standard and give to the public, so far as circumstances render it reasonably possible, the service which the statute requires.

The report was adopted as read.

RECEPTION AND MEMBERSHIP

The Secretary read the report of the Reception and Membership Committee which recommended for acceptance thirteen applications for membership, the names of which appear in another column.

The report stated that the President had announced his intention of visiting the Eastern Provinces at an early date and he had expressed the desire that as many members of the Executive Council as could arrange to do so should accompany him.

The adoption of the report, moved by Mr. Brigden, seconded by Mr. Findley, was carried.

BRITISH OFFICE.

The report of this committee was presented by the Chairman, Mr. Geo W. Watts. It outlined the scale of charges which it was decided to levy in connection with the supply of help through the Association's agent in London.

An analysis was presented of applications received to date, showing that in all 191 employees had been asked for in a large variety of trades. Distributed as to locality they were as follows: Ontario, 179; Quebec, 4; Manitoba, 5; New Brunswick, 3. Classified as to wages to be earned, 50 would fall in the class under $5 per week; 40 from $5 to $10; 88 from $10 to 18; 13 over $18. Of the total number asked for 119 were male and 72 female.

Mr. Henry Bertram seconded the adoption of the report, which was carried.

Mr. Wm. Smaill read the report of the Montreal Branch and Mr. John Firstbrook that of the Toronto Branch, both of which were received.

The meeting then adjourned.

MONTREAL BRANCH.

At the regular monthly meeting of the Montreal Branch, which had to be postponed until February 18th on account of the absence in Quebec of the Montreal Secretary, a number of legislative matters were taken up.

The best method to reform the present Garnishee Law of the Province of Quebec has been under consideration for some time. The committee are now petitioning the Quebec

Government on the lines suggested by Mr. F. W. Hibbard, K.C. If the proposed amendment to the law carries, the manufacturer will be relieved from the necessity of personally appearing in court whenever the wages of his workmen are seized for debt, and the workmen will be relieved from the heavy costs entailed by court actions.

The Secretary has been in Quebec looking after a number of important matters, including Workmens' Compensation, the amendments to the Montreal Charter, and fighting a proposed $500 tax on Montreal packing houses. His efforts in connection with the last mentioned item have already proved successful.

The Branch Membership Committee has inaugurated a campaign for new members, which it is hoped will be productive of good results.

TORONTO BRANCH.

At the regular monthly meeting of the Toronto Branch, held on February 14th, a discussion arose over the terms on which the Branch favored the disposal of land by the city in the Ashbridge's Bay district. It was felt that no land should be sold outright in that section, either to industrial concerns or railroads. A letter was received from the Hydro-Electric Power Commission stating that it would probably not be economical for manufacturers to store their own power except for lighting purposes. It was decided to co-operate with the Commissioner of Industries in taking the power canvass of the city. Commissioner Thompson has already begun his work and hopes to have the canvass finished in another month.

The Workingmen's Homes Committee announced a dinner for the evening of February 21st. This dinner held at McConkey's was a pronounced success. There were one hundred and fifty members of the Branch present, and the plan of the committee, which was fully outlined at the dinner, has won favorable comment from all the papers and from many influential citizens of Toronto. Its consummation is now almost beyond doubt, and in a few days the company, which will build 1,000 moderate-priced homes in Toronto, will be incorporated.

A resolution endorsing Premier Whitney's action in encouraging the refining of native ores by the granting of bonuses derived from the Provincial mining revenue was unanimously carried.

NEW MEMBERS.

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Stanstead Granite Quarries Co., Limited.—Monumental building and paving granite.

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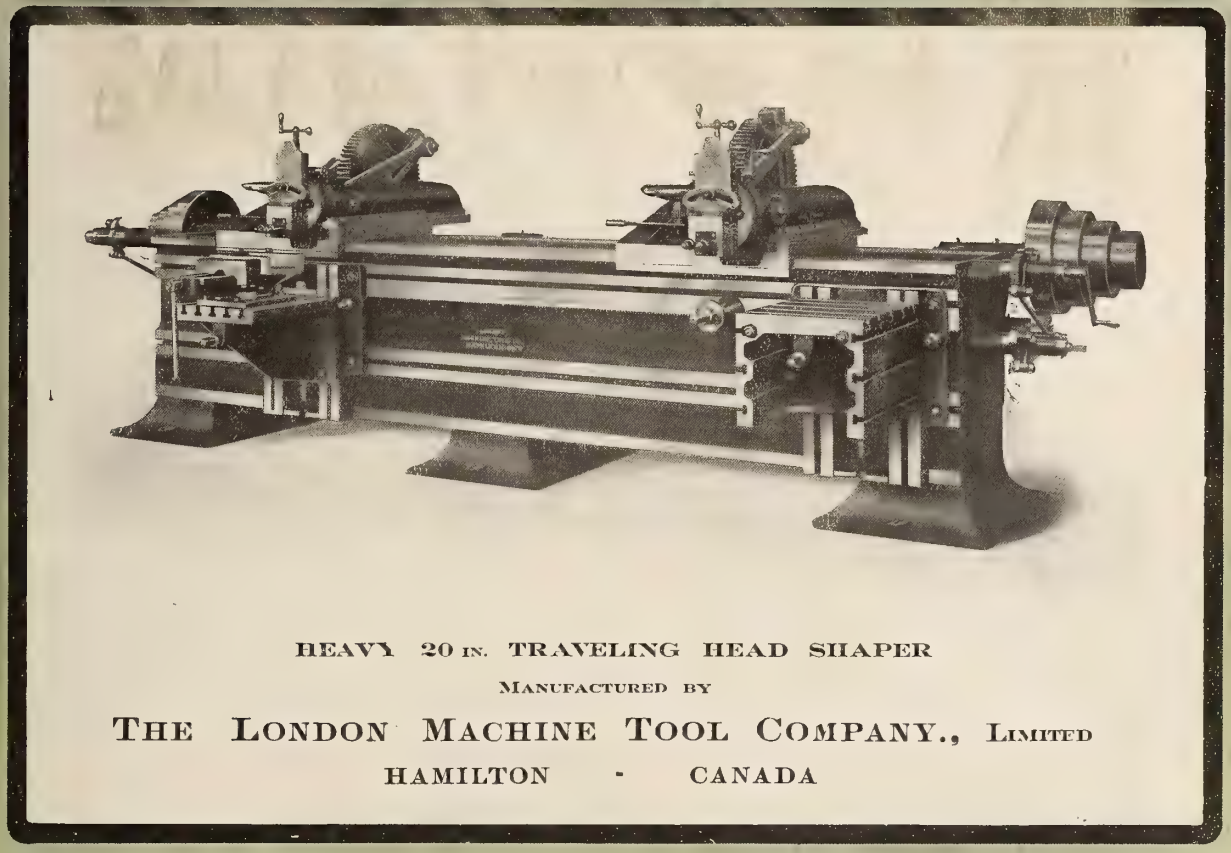
All signs point to an extraordinary number of immigrants from the British Isles to Canada during the present year. Already intending settlers to the number of over 500 a day are visiting the Canadian Government offices in London seeking information about this country. The class of men who are making enquiries are as a rule of a superior type—strong, healthy men of good character. The same conditions obtain all over the country. The Canadian officials are deluged with requests for information.

The new Canadian Government motor car exhibiting produce of the Dominion in its most attractive forms starts on March 15th on its tour of the agricultural districts from Penzance to Wick and the Orkneys. Moreover, twenty-five returned Canadian farmers, who are now touring their old British districts lecturing and visiting, are meeting great success.

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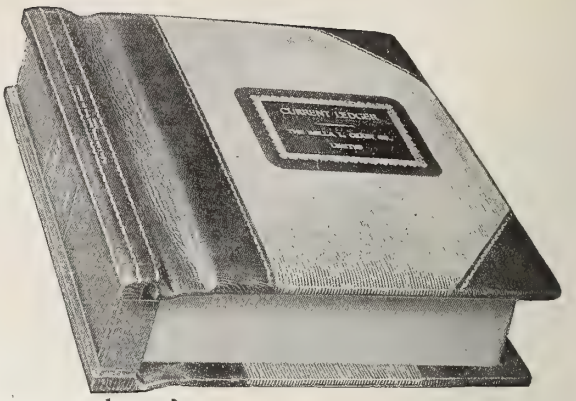
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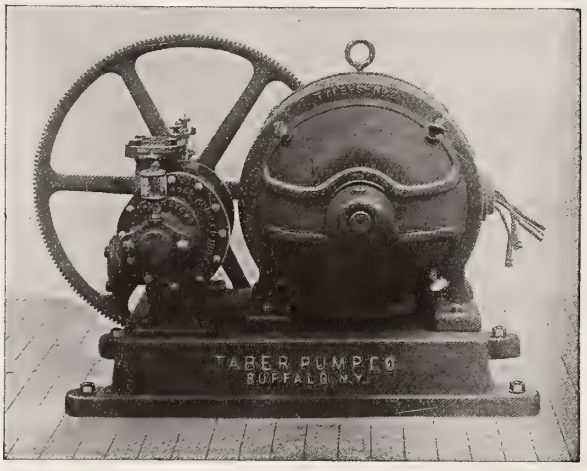
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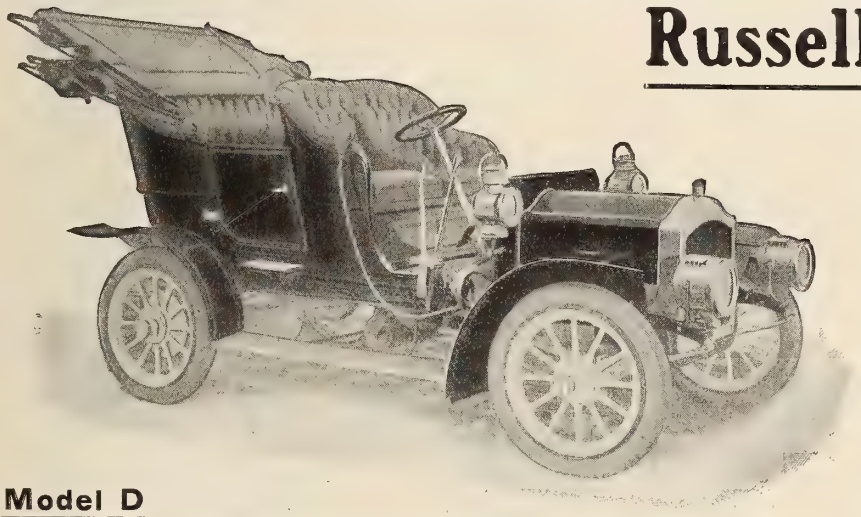
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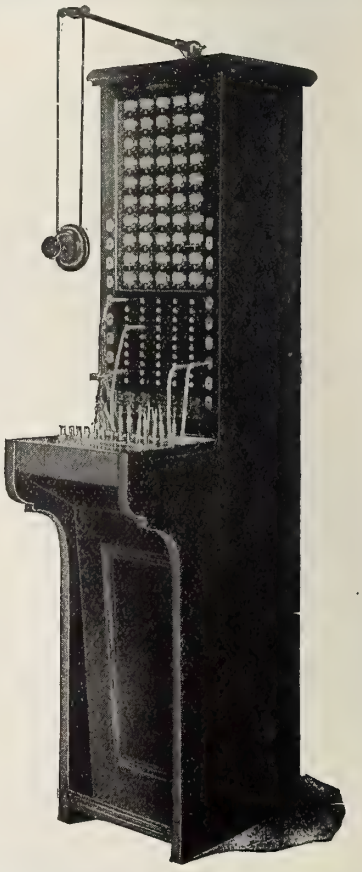
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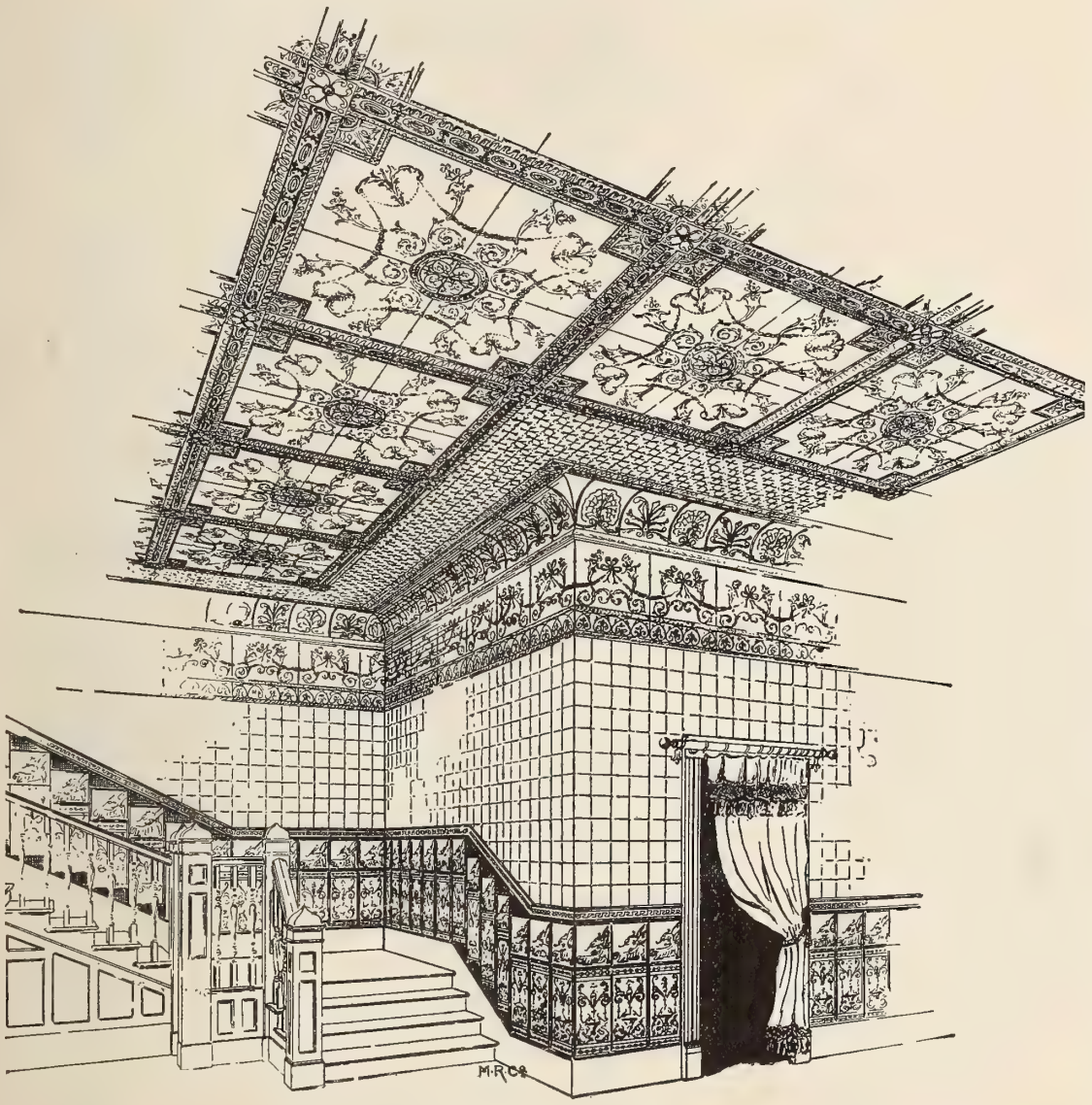
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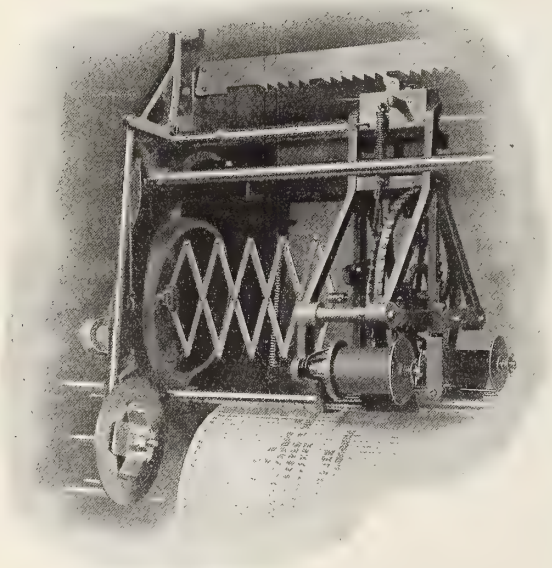
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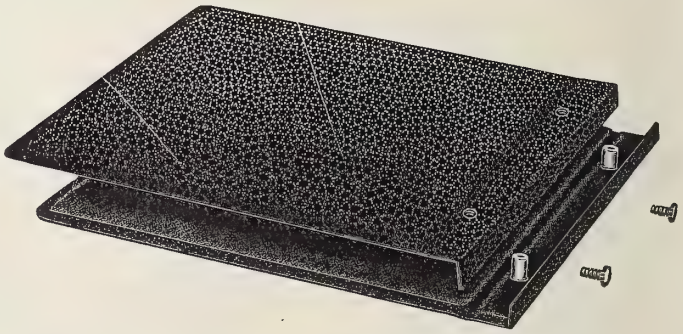
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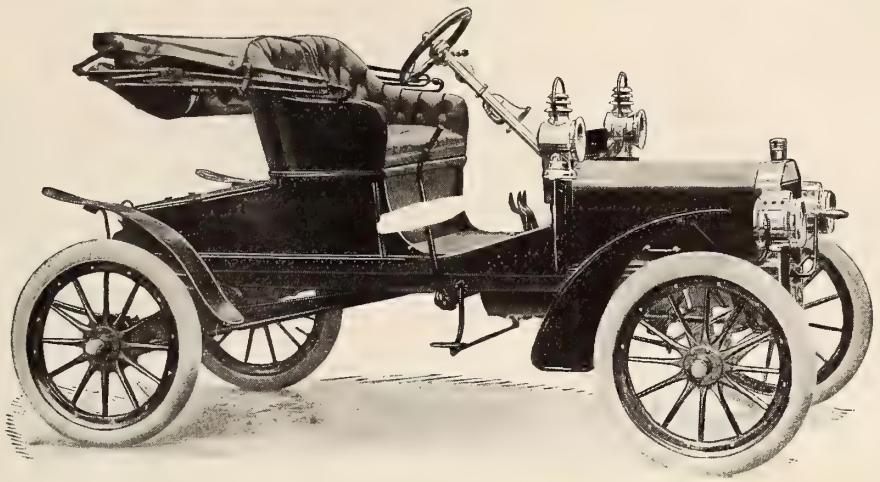
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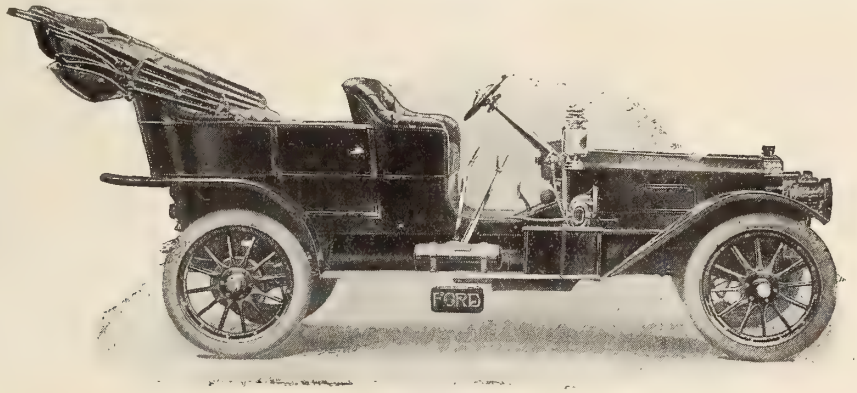
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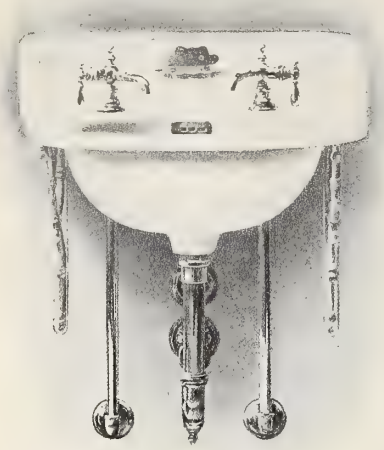
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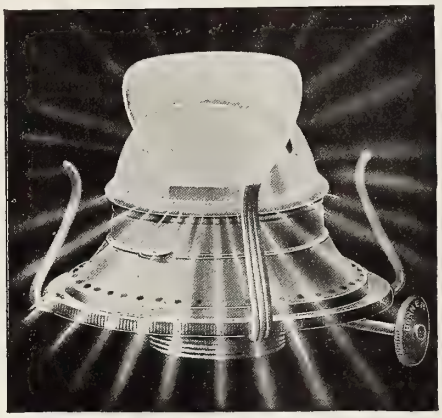
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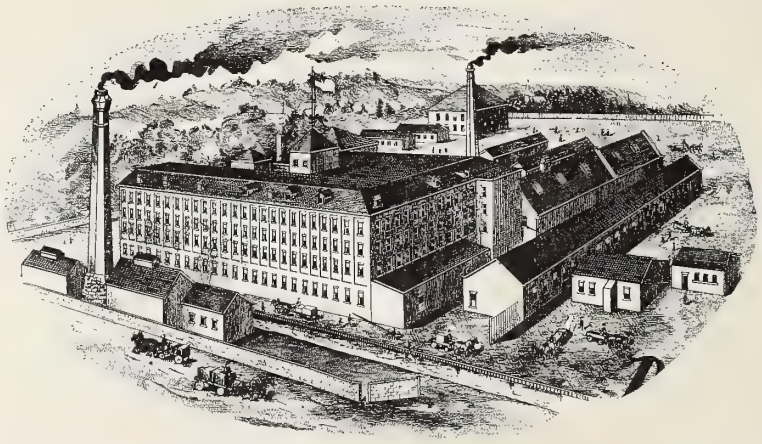
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Railway facilities are unequalled by any town in Western Canada.

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CHAS. F. ROLAND, INDUSTRIAL COMMISSIONER

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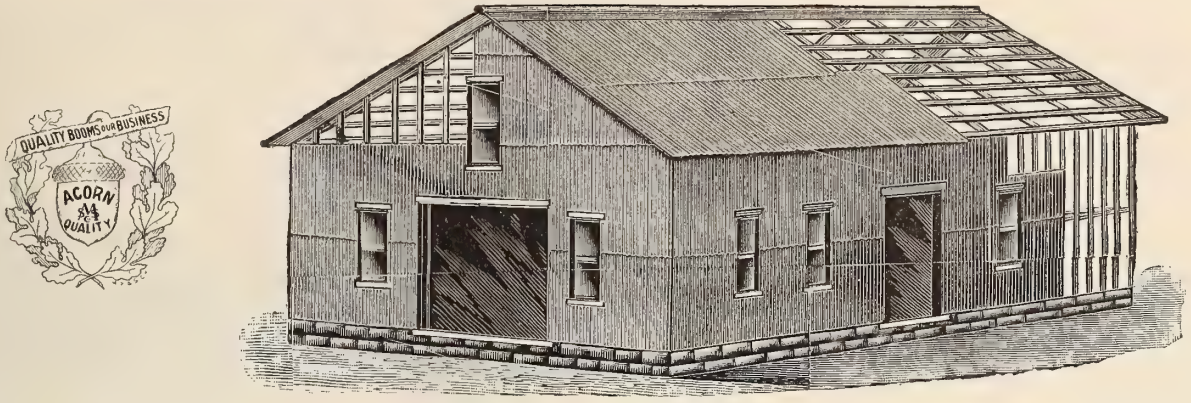
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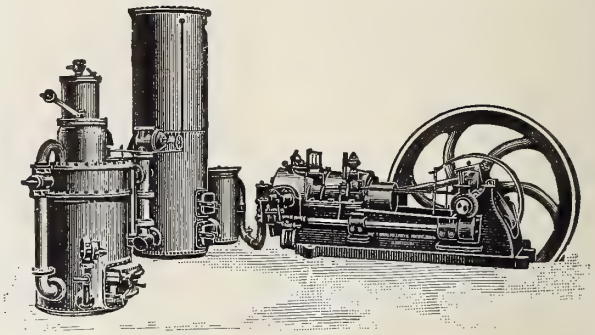
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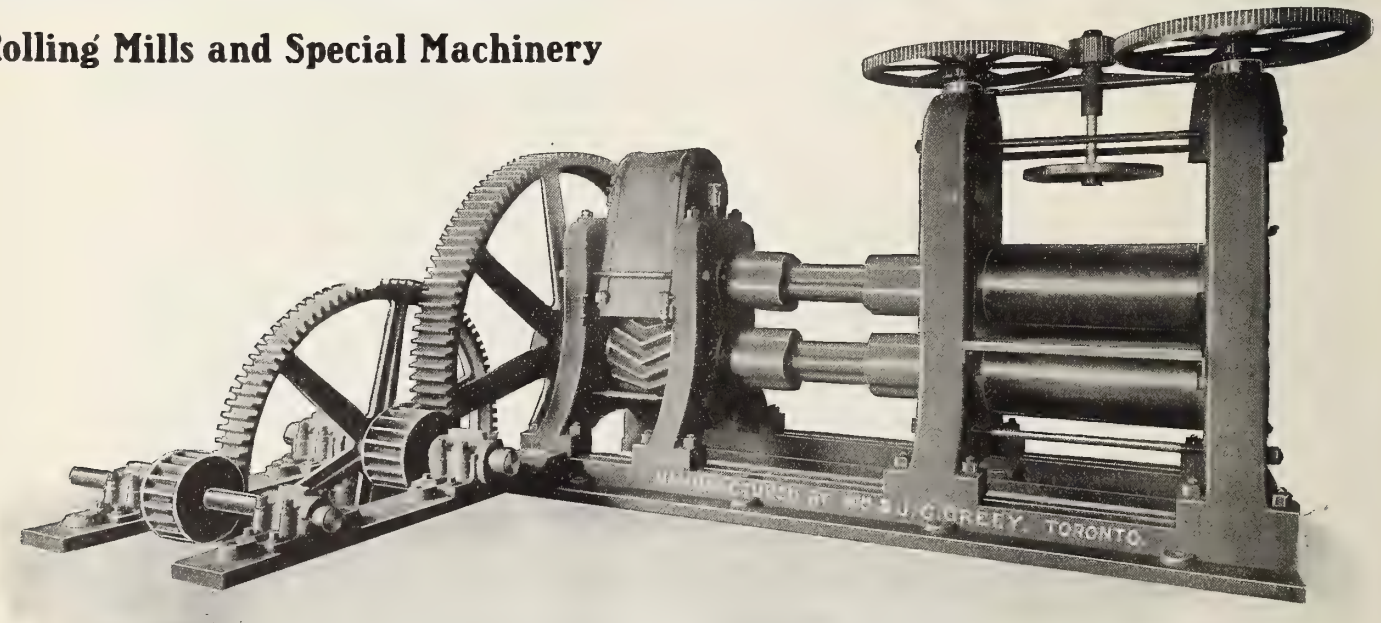
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Industrial Canada.

ISSUED BY

The Canadian Manufacturers' Association,

Incorporated.

"There be three things which make a nation great and prosperous: A fertile soil, busy workshops, and easy conveyance for man and goods from place to place."—Bacon.

Vol. VII. TORONTO, APRIL, 1907. No. 9

INDUSTRIAL CANADA

Issued monthly as the the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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THE VISIT OF MR. BRYCE.

MR. JAMES BRYCE, British Ambassador at Washington, is in Canada to confer with the Canadian Government on the details of a treaty which would eliminate all causes of friction between the two nations. In what is considered an inspired article, the New York "Evening Post" outlines the questions which are up for discussion, and states what Secretary Root considers an equitable arrangement of them.

Canadians are actively, vitally, interested in all the subjects proposed for discussion. First in order and in importance, is that of the trade relations between Canada and the United States. Canada has just gone through a pretty severe searching of heart in tariff matters. During the last eighteen months or more our manufacturers have been brought face to face with the question as to the effect various changes in the tariff would have. In other words, what had been in many quarters hitherto an academic discussion developed into a strong, personal consideration of conditions. It became necessary for each individual to figure out just exactly what influence the tariff had on himself and the workpeople who were dependent upon him Thus, the conclusion arrived at was not the result of unthinking theorizing; it was not sectional; it extended from one end of the country to the other, wherever manufacturing was carried on. And the conclusion was this: That the tariff as it existed before the revision, while in a number of lines of industry it was so inadequate as to cause complete disaster, was, generally speaking, sufficient during times of exceptional prosperity abroad to give Canadians a pseudo-prosperity, a false security. This prosperity, this security, resulted, not from the fact that foreigners could not undersell us in Canada, but from the fact that business was so brisk that they had difficulty in supplying their own home demands. In such a case they did not have to make any effort to secure an export market in Canada. But if a depression occurred abroad, then the prosperity of our manufacturers and workmen, and with them of every other element in the community, would fade into thin air. This is how it would work out: A retrenchment in the United States, for instance, would mean a general suspension of construction in new works. There would be at once an immense falling off in orders for steel and iron, and for building materials of every kind; the movement would work backwards; the suspension of structural work would at once decrease the demand for tools and machines. Each stage would mean the throwing out of employment of thousands of men. Hence, there would be a curtailment in the consumption of clothing, produce of the farm, etc.

What has all this got to do with Canada? Only this: The foreign manufacturer who has a plant capable of turning out ten thousand articles a day cannot afford to turn out only five thousand. His taxes or rent, his insurance, his interest on investment, his management expenses, are fixed. Owing to business depression there is just a market for half his product at home. He must find a market abroad. This is where it affects Canada. He will be satisfied if necessary with the normal profit on the goods he sells at home. If he can sell the rest of his output in Canada at a rate to cover the cost of keeping his plant running he is well satisfied. Meanwhile, the suspension of work has created an army of unemployed, with the result that wages have been reduced. To this extent his total cost is decreased. Under these circumstances what chance has the Canadian manufacturer? Owing to depression abroad he cannot export his goods. At home he has the competition of slaughtered foreign goods. His prosperity and that of his workmen, and of the farmers who feed them, is shown to have been based on an insecure foundation. It was dependent on external conditions; it depended upon foreign manufacturers being kept busy at home.

The revised tariff not only did not give the protection which is necessary against times of depression, but it introduced an element which is fraught with grave possibilities at the present time. The intermediate schedule, if inoperative, is a disturbing feature, destined to discourage the investment of capital; if it were put into force it would spell disaster to our industrial life.

Foreign countries are not slow to recognize the advantage to them of such a tariff. Before the ink is dry on the tariff bill as adopted, we have proposals from the United States for trade arrangements, reciprocal in name, though far from such in reality. The proposals which the Washington correspondent states Mr. Bryce is bringing to Ottawa for discussion are impossible. As the Ottawa "Free Press" says: "The twentieth century is Canada's century, and the Dominion is not now ready to sacrifice her national future for the sake of tariff concessions from Washington." But are the United States Government just haggling? When the present suggestions are turned down will they come back with a more moderate, yet still one-sided proposition, whereby they may get in under the guard of the intermediate tariff? Let our Government remember that even now in the United States retrenchment has begun. Depression may come ere long. Now is the time that Canada can least afford to make concessions to the United States.

SHIPBUILDING AND THE TARIFF.

THE GLOBE, in a recent editorial, says that Canada has destroyed her ship-building industry by protection. This is but a playing with words. We may just as well say that Canada has destroyed her ship-building industry by a lack of protection. It is equally true. On the one hand the tariff on the articles which go into the making of a ship have increased the cost of manufacture, and so shipbuilders are placed at a disadvantage in competition with their British rivals. On the other hand finished ships enter our ports without impost. Hence our own ships have no protection, and as a consequence the industry has languished.

But Canada must have a revenue. Eighty million dollars and more must be provided annually for the administration of the country. Even the "Globe" will admit that some tariff must be imposed. Or where shall we raise our funds? We must have a tariff. The advocates of high tariff and revenue tariff are agreed at least on this. If so, then shipbuilders will have to pay duty on what they import for the building of ships. For their raw material is somebody else's finished product; and we cannot suppose that shipbuilders would be specially chosen for favor and that all their imports would be exempt.

Then, to adopt the argument of the "Globe," Canadian shipbuilding, because of this duty, which is a necessary and inevitable impost, is doomed to destruction. This is the situation in which we now find it. The remedy lies in subsidizing shipbuilders. The 'Globe" admits that in a country where a tariff exists, shipbuilding must suffer. It further affirms that, granting the existence of a tariff and consequently the at least partial destruction of a shipbuilding industry, a subsidy is the best and only feasible corrective. Will anyone deny the necessary existence of a tariff? Must we not then take the second logical step and agree to the necessity of a subsidy?

A large shipbuilding industry is within our reach. Are we going to take the necessary steps to bring it into existence?

PROF MAVOR ON OLD AGE ANNUITIES.

ON another page of the present issue of "Industrial Canada" Professor James Mavor, of the University of Toronto, discusses the subject of old age pensions and annuities. A few days ago Sir Richard Cartwright introduced a tentative bill into the Senate, which provided for a system of deferred annuities. The bill was not pressed at the time, but was brought forward merely to get an expression of opinion on the subject.

The gist of the conclusions arrived at by Prof. Mavor is that either only a few would be benefited, and they not the most needy, or else all would benefit, in which case the cost would be enormous. Either horn of the dilemma makes such a measure impracticable in Canada at the present time.

Annuities may be provided by the Government either in return for voluntary contributions, or by compulsory tax, or as a straight Governmental expenditure. The last is what is commonly referred to as a pension scheme. Those who contribute voluntarily to a fund are not those who in the natural course of events will be most in need of assistance later on. Hence the first alternative is inadequate. Neither is the second scheme practicable. It fails to provide for the exigencies of lack of employment, hard times, etc. Besides, those who in old age most need assistance are usually those who in earlier life have not had enough to pay for more than the pressing needs of the day. Compulsory contributions presuppose steady work and a regular surplus over the present requirements. These conditions do not really exist. A country in course of time gradually accumulates a sediment of unemployables, shiftless ones and unfortunates. The collection of rates for this purpose would be considered intolerable by the great majority, and especially by those who would most benefit by it. The cost of giving pensions outright by the Government would require an enormous expenditure. It is estimated that the cost in Canada would be between $27,000,000 and $40,000,000. This only provides for a pension of $100 per year. Professor Mavor reaches the conclusion that provision for the aged poor can be effected by voluntary charitable agency more economically and more effectively than by a scheme of State annuities or pensions.

THE UNION LABEL AND RESTRICTED COMPETITION.

THE interview which the Board of Control of the City of Toronto recently granted to a deputation of union printers, who asked to have the union label put on all city printing, was instructive in a number of ways. First there was the opinion given by the City Solicitor, that it was "as illegal for the city to order the union label on city printing as it was to order it on the firemen's clothing." How illegal it was in the latter case was brought out most emphatically by Chief Justice Meredith, in the case of a Toronto Clothing Company, who contested the right of the City Council to insist on the union label being affixed to firemen's suits. "It was," he said, "beyond the power of the Board; it was restricting competition and creating a monopoly." This settled the question for the time being.

Another interesting feature of the interview was the willingness expressed by men who were elected by the whole citizen body to represent them, candidates in some cases especially supported by men of fairness as being above the use of demagogy, to assist in getting legislation passed which would permit of the compulsory use of the label. The meaning of this stand should be fairly understood. We have the absolute decision of the highest judicial authority

in the Province that if the city were to compel the use of the union label on its supplies it would "restrict competition and create a monopoly." The law as now constituted will not permit the city to do this. If special legislation is enacted whereby the City of Toronto, or any other municipality in the Province, is allowed to stipulate in contracts that the label should be used, will not competition be restricted and a monopoly be created just the same? The effect will not be changed. The moral wrong, the unfairness, the inequality, will not be any less wrong or unfair because they are legalized.

The absurd contention was made that the presence of the union label on a piece of printing makes that work better. We have yet to hear of any test of efficiency of workmanship enacted by a union before members are admitted. Without such, membership in a union does not imply the possession of any definite degree of skill. The presence of the label is no guarantee of quality.

At a subsequent meeting of the Council a disingenuous scheme to overcome the legal prohibition was carried through, with the approval and vote of the Mayor, and four of the five controllers. This consisted in a motion, which was carried, to request the successful tenderer to put the union label on all municipal printing. In some cases there is small difference between a command and a request. It was no doubt with this in mind that the vote-seekers of the City Hall voted for what will bring about the restriction of competition and the creation of a monopoly.

THE FRANCO-CANADIAN TREATY.

CANADIANS resident in Paris are agitating for an extension of the Franco-Canadian treaty, so as to make it applicable to a much larger number of articles than are at present included within its scope.

By the original treaty of 1894 Canada accords France preferential treatment on certain non-sparkling wines, all sparkling wines, common soaps, Castile soap, nuts, almonds, prunes and plums. France, on the other hand, gives Canada the advantage of her minimum tariff on canned meats, condensed milk, certain kinds of fish, apples, pears, preserved fruits, timber, flooring, staves, wood pavement, wood pulp, tanning extract, paper, skins, boots and shoes, furniture, and wooden sea-going ships.

It can scarcely be doubted that an extension of the treaty would result in a great increase of Canada's exports to France. During the last fiscal year they amounted to only $2,120,091, as against imports from that country of $7,698,047. These figures show a decided balance of trade against Canada, a balance which students of the situation claim is due mainly to the application of France's maximum tariff to the great bulk of Canadian goods.

Just what this maximum tariff means is, perhaps, better shown by the following list. All the articles enumerated therein, if originating in Canada and imported into France, would pay the maximum duty; originating in the great majority of countries having treaty rights with France, they would, on the contrary, pay only the minimum tariff:—

	General Tariff. Francs.	Minimum Tariff. Francs.
Salt pork, ham, bacon (per 100 kgms.)	50 00	30 00
Cheese	35 00	12 00
Fresh water fish	10 00	5 00
Agricultural implements	15 00	9 00
Machine tools, large	15 00	10 00
" " medium	20 00	16 00
" " small	70 00	50 00
Sash and door hardwood	25 00	20 00
" " softwood	15 00	12 00
Carriages	150 00	120 00
Delivery carts	15 00	12 00

The difference between the two tariffs is, in most cases, quite enough to make competition impossible in the French market. This difference tends to be accentuated, for the reason that every time the French Government makes or renews a commercial agreement with another country it seizes the occasion to increase the maximum tariff, the object being to make other contracting States more desirous to obtain the benefits of the French minimum tariff, and thus avoid the exorbitant and prohibitive rates of the maximum. As such increases of the maximum tariff are invariably maintained, and as they apply to all countries not enjoying the French minimum tariff, it follows that such countries find their exports to France injured by an increase of duty arising out of negotiations with which they had nothing to do, and which they had done nothing to provoke. Every increase of the general or maximum tariff made by France during the last few years, in consequence of negotiations with Italy, Russia, Switzerland, Spain, etc., has been applicable to goods from Canada.

Just what France would require in the nature of a quid pro quo is, of course, not known, but, providing it could be kept within bounds that would seem reasonable to a country that already has the short end of the deal, there is every reason to believe that an extension of the treaty would prove a popular move.

INTERNATIONAL POSTAL REGULATIONS.

HON Rodolphe Lemieux and members of the Post Office Department have been in Washington negotiating a new convention for handling mail other than first-class, coming from the United States. In allowing the old agreement to lapse, the Canadian Government has the support of Canadians in general. For years we have been carrying United States periodicals through our mails at a heavy loss. Literally tons of this class of matter have been distributed every day upon which no revenue has been received, and for which Canada has received no advantage in return. There has been no reciprocity in the existing regulations. Canada sends practically no periodicals to the United States.

Our national life has suffered a distinct loss through the influx of United States Magazines. While some of them contain much that is of a high order of merit, the majority are filled with articles which are far from British in their tone. In some cases, where an American edition of English magazines is issued, the copies which reach the Canadian reader are emasculated by the omission of distinctly British articles and the substitution of American matter therefor. The result is seen in a growing ignorance in this country of British affairs.

An active campaign is being started by United States publishers to have the old regulations continued. Canadian advertisers in these periodicals have been urged to use their influence against any change. Of course it is to the advantage of the United States publishers to have free access to the Canadian reading public. It is equally advantageous to United States advertisers to be able to send their advertisements broadcast over this country, at publishers' rates. But the Canadian public have to pay the piper. We have to make up for the loss which our Post Office Department suffers through the free carriage of all this matter. A more equitable arrangement is necessary.

COMMENT OF THE MONTH

Readjustment of International Rates.

Good progress is being made in connection with the readjustment of freight rates. It is hoped that something definite in regard to this vexed question which has been so long outstanding will be announced at an early date.

Railway Equipment.

No further announcement has been made by the Board of Railway Commissioners in respect to the order issued regarding railway equipment. The shipping public are anxious to learn, as far as it is intended to make it public, the result of the enquiry. It is to be hoped that the Commission will give the same publicity to the replies from the companies as they did to the enquiry.

Traffic Forms.

A draft of the general terms and conditions of carriage for the new bill of lading has been received from the Railway Commission. No discussion of this has taken place as yet between the Board and the Companies. The Board, however desires that as great publicity as possible should be given the consideration of the conditions, in order that all interested may be able to make any representations they may desire. These must be filed with the Secretary before the first day of May next. The Railway and Transportation Committee of the C. M. A. have these conditions now under discussion.

Do German Goods Receive Preference?

The Canadian Trade Representative at Leeds and Hull writes that he is informed that a very large amount of German cutlery, razors, etc., is shipped from Germany to Sheffield, and is there exported and sent to Canada as Sheffield goods. The complaint is not a new one. The necessity of guarding carefully against such frauds as this was pointed out in these columns some months ago. It would appear that there is just one method of overcoming this dishonesty, and that is eternal vigilance. Inasmuch as these fraudulent transactions entail a loss upon British manufacturers, Canadian manufacturers, and the Canadian customs, there should be ample opportunity of keeping track of imports.

Entente Cordiale.

Word has recently been received that negotiations are under way for a monster exhibition to be held in Shepherd's Bush, London, England during the months from May to October, 1908. It will be known as the "Entente Cordiale Exhibition," and will be participated in by Great Britain and her colonies on the one hand, and by France and her colonies on the other. It will be under the direct supervision of the governments of these two countries, both of which will contribute liberally to its support. The French Government expect to prepare the largest and best exhibit they have ever attempted outside of Paris. Canada, as an old French dependency, and the premier colony of the British Empire, is expected to take a prominent part.

Will Stop Waste.

The conservation of our natural resources, which has been urged so strongly of late in the case of our timber supplies, has received attention in a measure recently introduced in the Legislature of the Province of Ontario. The reckless manner in which natural gas and oil have been wasted has had its effect already in a diminished flow from the wells. In many localities a shortage of natural gas would be fatal to industries, and would mean a great inconvenience and loss to private citizens, who use it for heating and lighting. The proposed Act provides for the closing up of wells until they are being actually utilized. Moreover, it makes it compulsory, in the case of abandoned wells, to properly plug up the same in order that there may be no waste. Fines are appointed for failure to comply with the regulations.

Develop Natural Resources.

The pulp-wood question is thus concisely summed up by the Victoria "Colonist": "Indications are that in a very few years Canada will have substantially the only reserves of pulp-wood on the American continent. Under these circumstances the exportation of pulp-wood ought to be prohibited. We would thereby secure the establishment of paper manufactories in the Dominion." The policy of Canada should be to carry on the development of her natural resources to as advanced a stage as possible. It is not enough to cut trees or mine metals and ship them across the line. Canada should be enriched by the work done in changing these raw products into finished articles of use. Only in this way will we develop a strong class of skilled workmen, earning good wages, and being in turn liberal purchasers of the products of the farm and the factory."

The Study of Forestry.

Some months ago, on the resignation of Mr. Judson Clark, the Provincial Forester for Ontario, "Industrial Canada" expressed the hope that the disappearance of this office was only the forerunner of the establishment of a permanent department of forestry in the Provincial University. It would appear that such is to be the case. A recent report states that Prof. Fernow, of New York, has consented to take the new chair of Forestry. The need for such a course has long passed the stage of discussion. It is now generally conceded that on the preservation of our forests depends more than was even imagined a few years ago. Prof. Fernow is already known in this country, having lectured before the Experimental Union of Ontario a couple of years ago. He should do much to bring about a proper appreciation of the importance of his subject to the Canadian public.

A Common Warehouse in England.

A suggestion has been made by Mr. W. T. R. Preston, Canadian Trade Representative in South Africa, that a cold storage warehouse be opened in England, jointly by all the exporting colonies. At present no one colony does a large enough business in fruit and perishable produce to justify it in the expense of keeping up such an establishment by itself. The present suggestion, by dividing up the cost, would seem to make the project feasible. There are two main reasons for establishing a warehouse of this kind. It

would provide a cold store where goods could be placed immediately after disembarkation, so they would be in the best condition for immediate distribution. Again, it sometimes happens that the market is temporarily over-supplied or prices are artificially depressed. With a cold storage warehouse they could be kept in sound condition until market conditions proved favorable. The scheme has much to recommend it.

Send Names of Representatives.

For the sake of facilitating foreign trade, the Commercial Intelligence Committee of the Canadian Manufacturers' Association has issued the following letter to manufacturers: "For the information of Canadian Commercial Agents abroad, who are endeavoring to direct enquiries for Canadian goods to the nearest and most reliable sources of supply, we would ask you to send us at your earliest convenience a list of your foreign representatives, with their addresses in full. Our intention is to furnish each Commercial Agent with a list of the representatives of Canadian houses doing business in his territory. This, we believe, will greatly facilitate the work of these officers, and prove mutually beneficial. As the list will be corrected from time to time, we trust you will not fail to advise us promptly of any changes you may effect in the future." The request is signed by Mr. T. A. Russell, chairman of the committee, and Mr. G. M. Murray, secretary.

Our Labor Department.

Applications for help to the Association's Labor Department still keep pouring in. Since the inauguration of the department some two months ago, over 700 operators have been called for in all parts of the Dominion, and for all classes of work. These operators are not to take the place of strikers or discontented employees, but simply to provide for the steady expansion of the Canadian manufacturing industries. For the most part the men required are skilled artisans who will earn from $12.00 to $18.00 per week or more.

Thus far the help that has been supplied has been of a very satisfactory character. Indeed, we have yet to learn of a single employer who has not been more than pleased with the men that have been sent him. But perhaps this is no more than was to be expected, considering the careful inquiries that are made as to the character and ability of each applicant by our London agent.

Want a Drydock.

Will Montreal have a dry-dock? The new Harbor Commissioners have entered upon their work with such enthusiasm that they seem to have carried the citizen-body with them. The shipping interests have got together, and have formulated a scheme for a dry-dock; not an ordinary, fairly good dry-dock, but one that will be without a peer on the continent, and with only one like it in England. The need for this accessory to navigation has been felt for years. Montreal is a big ocean port, into which enters each year a vast amount of shipping. Accidents are sure to happen requiring the docking of ships. The case of the "Bavarian" is a particularly regrettable example, where, after the boat was laboriously floated, there was no dry-dock to accommodate her during repairs. These facts have been laid before the Harbor Commissioners, and the latter are giving the suggestions their careful consideration. The shipping companies state that there will be no difficulty in keeping such a dock busy.

Revision of Express Charges.

As the result of persistent effort, all express companies operating in Canada have been placed under the jurisdiction of the Board of Railway Commissioners. As a consequence, all tariffs for service within Canada must be submitted and approved before May 1st, 1907. Charges affecting carriage between Canada and any other country must be submitted and approved before July 1st. Many complaints regarding this service have been made, and it devolves upon those who have suffered from unfair conditions to file their objections at once in order that proper representations may be made to the Board.

The Transportation Department of the Canadian Manufacturers Association have taken the matter in hand, with a view of securing an equitable arrangement with the companies. The rates which will be approved during the next few months will no doubt remain operative for a considerable time. It is accordingly most important that all the light possible be thrown on the subject now, while there is still time for action.

Restriction on Pawnbrokers.

Some important amendments have been proposed to the Pawnbrokers' Act of Ontario. Their effect, if adopted, will be to safeguard jewelers against many of the dishonest acts by which they are now victimized. The amendments, however, are submitted no less in the interests of legitimate pawnbrokers than of those who are most frequently injured by the transactions of the dishonest dealers. One provision of the amended Act provides for the depositing with the police authorities each morning of a complete list of everything upon which money was loaned during the preceding twenty-four hours, with the names and addresses of the borrowers. This will enable the authorities to detect thefts and run down the delinquents. Another clause forbids the melting down of gold or silver, which is a wise precaution. It is further provided that no pawnbroker shall carry on any other business in connection with his loan business. The pawnbrokers object to the stringency of the proposed amendments, and will make representations to the Government on the subject when the bill is taken up in committee.

Scarcity of Labor.

When our large employers will use the services of our Bureau to bring out 700 workmen at a time of the year when factory help is supposed to be most plentiful, and pay us from $2.00 to $5.00 for every man engaged, it shows conclusively that they mean what they say when they claim that skilled labor is scarce. Believing that it has been so for some few years past, the Association has from time to time prepared statistics from figures supplied by its members to show what the scarcity really amounted to.

It was claimed by the labor unions that these figures were padded, and that publicity was given them for the purpose of flooding the Canadian labor market. It is not, and never has been, any part of the Association's policy to bring men to this country for whom there is no work. On the contrary, the Association does what it can to discourage the immigration of artisans in trades where the supply of labor is already equal to the demand. But something must be done to provide for the labor needs of expanding industries, and if the Government persists in refusing to recognize the needs of any interest other than that of the farmer, then these wants must be supplied by private enterprise

Weights and Measures.

Six or seven years ago the Association in a moment of weakness placed itself on record as favoring the adoption of the Metric system of weights and measures. We say it was in a moment of weakness, not by reason of any prejudice against the system itself, but simply because the decision was arrived at without the investigation which the seriousness of the problem deserved. After the Association's official mind was duly made up, it began to think matters over. It has been thinking ever since. Three years ago an attempt was made to solve the question by taking a plebescite of the entire membership, but to no purpose, for only about one-third of the members replied, and among those that did, opinion was almost equally divided.

The question of Weights and Measures is altogether too far-reaching a one to be disposed of by mere academic resolutions, and no amount of desultory argument can ever bring us any nearer an ultimate solution. What we need is a searching investigation into the relative adaptability of the Metric and English systems to every phase of commerce and industry, and the facility with which the transfer from one system to another might be affected. This can only be done by means of an Imperial or International commission, and until such a commission has brought in its report, it is the part of wisdom to make haste slowly.

Workman's Compensation.

It is high time that some steps were being taken to consolidate and amend the various acts relating to factory accidents so that the manufacturer who finds himself in the unfortunate position where he is compelled to employ others to work for him will know exactly where he is at. In Ontario, for example, suit may be brought under the Common Law, Lord Campbell's Act, or the Workman's Compensation for the Injuries Act, to which there may soon be added Mr. Crawford's Bill making compensation compulsory. No matter how fair-minded the employer may be when treating with an injured employee, it is almost impossible for him to keep out of court and avoid heavy damage suits when there is so much vaguely constructed law against him, and when there are so many ambulance-chasers continually on the watch to get him into trouble! With the principle of compensation itself no one will find fault. The suffering and loss sustained by employees in the discharge of their duties ought to be paid for, and may fairly be regarded as a tax on production. But there is no reason why for every dollar paid an injured workman another dollar should be paid for law costs. Nor is there any justice in legislation which creates a liability for industrial accidents without determining the limits of that liability. What we want is not more law on the subject, but an entirely new law.

In the Van of Progress.

Hats off to the Premier of Nova Scotia! And every success to his project for the establishment of Technical Schools! While the Premiers of other provinces have steadily avoided the subject for fear they might be regarded as faddists, Premier Murray by this one act has raised himself to the level of a statesman and has placed his province in the front rank of educational progress.

The system of technical education which his bill provides for is based on sound and comprehensive lines. When worked out in all its details it will place at the disposal of the young man in Nova Scotia facilities for industrial training, the equal of which can be found nowhere else on this side of the Atlantic.

In the smaller technical schools, to be established with a view to meeting the requirements of local population and local industries, working men can train themselves in the theoretical and scientific principles upon which their vocation in life is based, and acquire some familiarity with the most advanced practice of their trade in other parts of the world. The schools of mining which have already been in operation for some time furnish an excellent example of the success with which this system can be applied. In the higher school, or Institute of Engineering, instruction will be given those students desiring to qualify themselves for the engineering profession, while at the same time research work will be carried on by a corps of scientific experts with a view to determining how best the raw materials supplied by the province can be utilized in the manufacturing industries.

Such a policy cannot fail to give a tremendous impetus to industrial development, and if the other provinces will only follow the lead of Nova Scotia and resolve upon some concerted action in the matter of technical education, Canada can be made to forge ahead at a rate hitherto undreamed of. Will they do it?

Provincialism Must Go.

The Legislators of Quebec have at length seen the error of their ways and removed the obnoxious tax on commercial travellers. Their confreres in British Columbia have also admitted that the principle is wrong, and have taken a big step towards making amends in that they have removed the tax from all travellers except those who represent liquor and tobacco houses. Evidently the westerners have found it too great a wrench to tear themselves free from the shackles of provincialism all at once, so they are proceeeding to unload by degrees. Or possibly it is that the demand for liquor and tobacco out on the Coast is such that no amount of taxing will prevent the traveller from doing business, and the Government really needs his money. However that may be, the commercial interests of Canada may well rejoice over two sinners that have repented.

But these as well as all the other Provinces of the Dominion need to do a lot more repenting. There have been too many petty jealousies among them. They have not been following the Golden Rule. Their legislators have given more time and study to seeing that the other fellow did not get ahead of them than they have to promoting the real welfare of the Dominion. Instead of facilitating the transaction of business as between Province and Province, they have been building high board fences around themselves. Instead of opening the gates to a free interchange of lawyers, doctors, engineers and professional men, they have been enacting legislation which is tantamount to an invitation to the people of other Provinces to keep out.

If Canada is ever going to amount to anything the Provinces will have to abandon this attitude of narrow provincialism. If they persist in their policy of jealous interference one with another they will wake up some day to the fact that a rank outsider has beaten them all out. What the Provinces ought to do is to join hands and help each other along as much as possible, instead of wasting their time in a fruitless endeavor to trip each other up. Co-operation, concentration of effort, is the keynote of success in modern commercialism, and the sooner the Provinces recognize this and frame their legislation accordingly, the sooner will the best interests of the nation be served.

OLD AGE PENSIONS AND ANNUITIES.

By JAMES MAVOR, Professor of Political Economy, University of Toronto.

THE editor of INDUSTRIAL CANADA has done me the honor of inviting me to contribute an article on the subject of "Old-age Pensions and Annuities." Sir Richard Cartwright in his very interesting speech in the Dominion Senate on 28th February gave an outline of a scheme for old-age annuities, contained in a draft bill which has been laid before the House of Commons. The outline, both in the speech and in the draft bill, is too meagre to justify any decisive opinion upon the scheme; what follows must, therefore, be regarded as provisional.

Sir Richard lays down as the cardinal principles of his plan the following:—

1. That it should be absolutely safe.

2. That there should be an absolute freedom from forfeiture on account of failure to maintain the contributions.

3. That in the event of the death of the intended annuitant prior to the date when the annuity begins to be payable, the money actually paid in should be returned with "reasonable interest."

Sir Richard added as a feature of the scheme that it should be carried out "practically without cost, or at an infinitesimal cost, to the State—infinitesimal, that is to say, in proportion to the benefits to be bestowed." He also expressed his disapproval of old-age pensions as applied to Canada, saying: "My own impression is that, in a great many cases, such a scheme would be found to encourage extravagance, and the result would be that the thrifty, industrious workingman would find himself compelled ultimately to bear the burden of his less industrious and possibly dissolute companion."

From this explanation it is evident that what Sir Richard means to propose is a system of annuities, and not one for old-age pensions. Moreover, although the draft bill gives powers to the Government to sell immediate as well as deferred annuities, Sir Richard's observations refer particularly to deferred annuities. These annuities, Sir Richard says, would begin at sixty or sixty-five years of age, and would be provided for by contributions from the would-be annuitant. These contributions would, he says, amount to the wages of from one hour to one hour and a half per week. If these contributions were continued from the attainment of his majority by the person concerned until he reached the age of sixty, he would receive an annuity of $120 per year for the remainder of his life; or, if he refrained from taking his annuity until he attained the age of sixty-five, he would obtain $200 per year, contributions ceasing at the age of sixty. The rate of interest upon which these calculations are based is from 3½ to 3¾ per cent.

The draft bill furnishes little information beyond that conveyed in Sir Richard's speech. No rate of interest is specified. The rate is to be determined from time to time by the Governor-in-Council; that is, by the Government. The interest of a beneficiary in a Government annuity is not susceptible of hypothecation, nor open to seizure by creditors. The amount which may fall to be handed to the heirs, in the event of the death of the beneficiary prior to the date at which the annuity begins to be payable, is similarly exempt from seizure by the creditors of the deceased.

The scheme as set forth above is evidently intended to be a purely voluntary one; there is no suggestion of compulsion. The first question which emerges is this: "Is there any demand for a scheme of old-age annuities?" Sir Richard practically answers this question when he tells us that he has examined the records of the insurance companies, and that he finds "there are practically no annuities now being taken out in Canada." He attributes this to the fear that an ordinary corporation might be unable to implement its engagements in the remote future. This argument would, however, apply equally to the life insurance of the same companies. It suggests also that public opinion upon insurance companies as to their solvency is not favorable in spite of Government supervision. It is true that recent enquiries into the methods of some insurance companies have shown that these are open to criticism, yet there can be very little doubt of the present solvency of the companies, notwithstanding the disclosures which have been made. Since during past years large amounts have been invested by working people in insurance and relatively small amounts in annuities in the same companies, it would appear that doubt of the solvency of the companies is not the reason for the unpopularity of the annuity. We must seek for some other reason or reasons. The unpopularity of the annuity is by no means confined to Canada. It is to be found everywhere. The reasons seem to be as follows:—

1. Where the annuities are granted by Governments, the low rate of interest upon which these are habitually based leads to a relatively high cost of the annuity as compared with other methods of provision for old age.

2. The relatively higher cost of the annuity as compared with other methods of providing for old age offered by the same insurance companies.

3. The absence, as a rule, of any canvassing for annuity business, and the great amount of canvassing for insurance business by private companies.

4. The irrevocability of the sums paid. Even where the sums paid are returnable in the event of the beneficiary being unable to maintain his payments, the return is not usually made until the beneficiary has attained the age at which the annuity, had it been in force, would have begun to be paid.

These circumstances have contributed to render the annuity less attractive than simple deposit in a savings bank. The following statistics from the last report of the British Postmaster-General illustrated this point:—

	Investments in Government Stock by Savings Bank Depositors.		Annuities Purchased by Savings Bank Depositors. Immediate.		Deferred.	
	No.	Am't.	No.	Am't.	No.	Am't.
1896	16,912	£1,065,573	2,208	£60,965	202	£4,178
1897	16,935	1,078,849	2,051	56,237	207	4,009
1898	20,162	1,303,990	2,065	55,753	164	3,626
1899	26,531	1,770,170	2,031	54,044	147	3,085
1900	41,030	2,830,513	2,258	49,893	137	2,722
1901	46,550	3,065,596	1,764	42,268	142	3,066
1902	40,893	2,592,988	1,679	42,791	139	2,973
1903	47,726	2,921,499	1,763	43,973	157	3,424
1904	39,633	2,283,877	1,768	41,000	128	2,492
1905	32,301	2,056,041	1,840	45,488	158	3,204

The numbers and amounts taken out annually of annuities, both immediate and deferred, have declined about 25 per cent. during the past ten years; while the annual amounts invested in Government stocks by savings bank depositors have nearly doubled in the same period.

Contracts for annuities entered into between 17th April, 1865, till 31st December, 1905:—

Immediate Annuities.		Deferred Annuities.			
		Money not returnable.		Money returnable.	
No.	Amount.	No.	Amount.	No.	Amount.
45,814	£991,928	1,449	£25,951	2,703	£59,390

These statistics show that deferred annuities have not, so far as the British Post Office is concerned, met with the success anticipated for them by Mr. Fawcett, on whose initiative they were introduced. Immediate annuities have been more successful; but the most successful of all the forms of investment offered by the Post Office is the ordinary savings bank deposit; and next to the ordinary method of deposit there comes the method of investment in Government stock.

Amount, including interest, at the credit of depositors in the Post Office Savings Bank.

	(a) Open Accounts.	(b) Stockholders.
1896	£108,098,641	£6,891,891
1900	135,549,645	10,468,290
1905	152,111,140	17,877,644

The above statistics show also, I think, conclusively that the unpopularity of deferred annuities is not due to want of opportunity to invest in them under conditions of absolute security. The workingman wants some more flexible means of investment for his savings.

In Canada the favorite form of investment for the workingman is undoubtedly found in the purchase of the house in which he lives. This affords a ready means of progressive investment, an investment much more attractive than a Government annuity, and with security nearly as great There may also be added the influence of the high rate of interest paid by loan companies, and even by the chartered banks on deposits. Considerable funds are left by working people to accumulate in these depositaries.

Probably the development of life insurance, involving active canvassing, has had much to do with the unpopularity of the annuity. Much also may be attributed to the activity of the friendly societies, whose social features constitute a great attraction. The invalid funds of many societies provide in practice old-age allowances, while the endowment policies of insurance companies give at specified ages funds wherewith annuities may be purchased if desired. In case of need the policy of an insurance company may be hypothecated and funds borrowed upon the security it affords.

It is obvious that in order to do an annuity business on a voluntary basis the Government would require to compete against the friendly society, the insurance company, and to some extent also the trade union. This was very clearly expressed in a minority report of the Royal Commission on Aged Poor (1895) by Mr. Henry Broadhurst, M.P.:—

"The evidence tendered by working class witnesses goes, in my opinion, to show that any scheme involving contributions, otherwise than through the rates or taxes, would meet with much opposition from the wage-earners of every grade. The friendly societies and the trade unions, to which the working class owe so much, naturally view with some apprehension the creation of a gigantic rival insurance society, backed by the whole power of the Government. The collection of contributions from millions of ill-paid householders is already found to be a task of great difficulty, intensified by every depression of trade or other calamity. For the State to enter into competition for the available subscriptions of the wage-earners must necessarily increase the difficulty of all friendly societies, trade unions, and industrial insurance companies, whose members and customers within the United Kingdom probably number on the aggregate eleven to twelve millions of persons." *

In his evidence before the same Commission Mr. Reuben Watson, actuary of the Manchester Unity of Oddfellows, was very emphatic in his condemnation of a system of old-age pensions or annuities which involved the collection of contributions:—

"I think if the State has to deal with this question, it would be better to deal with it boldly: make it an acknowledged duty, and give the money, but do not call, do not force the people to pay for it directly. As for how it is obtained—the State's money is obtained—I have nothing to do with that. I would only say, if it is to be done by the Government at all, that would be the better way to do it: boldly, rather than to enter on a dark future which nobody could tell where it would end or lead to." †

These remarks apply specially, of course, to Mr. Chamberlain's scheme; but they apply also to a certain extent to the less ambitious and wholly voluntary scheme of Sir Richard Cartwright.

The next important point is the cost to the State of the scheme which is proposed. The materials for forming an estimate of this are not yet forthcoming. The bill is, indeed, very vague on all practical points. The elements of cost may, however, be set out:—

1. The difference, if any, between the rate of interest upon which the annuities are calculated and the rate which the Government pays for its other obligations.

2. The cost of administering the fund.

The total cost may thus be estimated hypothetically: If the rate of interest which is allowed to the annuitants is 3½ per cent., the minimum, as stated by Sir Richard Cartwright, and if the Canadian Government issues its debt at 3 per cent. for par, then the cost to the Government is ½ per cent. The cost of administration may probably be placed at ¼per cent., so that the total cost in this case would be ¾ of 1 per cent. If the rate were 3¾ per cent., the cost would be fully 1 per cent.

This amount would have to be raised by taxation. The objections to such a scheme are well put by Mr. Broadhurst:—

"It has, in my judgment, been conclusively proved, by witnesses of all shades of opinion, that any voluntary scheme of national insurance or contributory pensions would benefit only those who could afford to make the contributions, and would leave unaffected the great majority of the aged poor, whose wages have been insufficient, or whose work has been too irregular, to allow them to save. The grant of any aid to such a scheme out of the taxes would amount, in my view, to actual hardship upon the very poor. The agricultural laborer, the unskilled worker in the towns, and the women wage-earners—few of whom could ever obtain a pension under an insurance scheme—would be taxed on every cup of tea or pipe of tobacco, in order

* Report Roy. Com. Aged Poor, 1895, Vol. I., p. xcix.

† Report Roy. Com. on Aged Poor, 1895, Vol. III., p. 619.

that pensions might be awarded to the comparatively comfortable class of well-paid mechanics and foremen, who were in a position to make the contributions required." ‡

While the cost to the Government may be considerable, the cost to the annuitant of the provision may be large also relatively to other methods of provision, some of which have already been mentioned.

1. Sir Richard Cartwright's first criterion is "absolute security." Absolute security can only be had by paying for it in one form or another. Highly accredited securities must enter into competition with other securities less highly accredited. When there is an ample choice of fields for investment, as there is at present, Government securities must take their chance with others. The reason for the present low price of Government securities is not that the credit of the Government has fallen, but because, in the competition for investment funds, Government stocks, which yield comparatively low rates of interest, are at a disadvantage as compared with industrial and other stocks, which, although they involve relatively high risks, yield, nevertheless, greater net returns on the whole. It is clear, therefore, that a Government annuity system would succeed best when industrial securities were scarce and dear, and when the rate of interest paid by the Government was thus relatively high.

There would thus be a tendency, excepting when the two systems were in equilibrium, either for the Government or the annuitant to lose.

2. Sir Richard's second criterion is that there should be an absolute freedom from forfeiture.

This is a desirable condition for the stable contributor, who may be temporarily embarrassed; but all contributors are not stable. In this country there is a great deal of migration. Large numbers of workingmen move about, not merely in Canada, but frequently between Canada and the United States. In a northern town in Ontario, for example, one hundred men out of seven hundred employed will, I am informed, fail to turn out for work on Monday morning, when it will be found that they have left the town and gone over into the United States. It is true that their places will be filled by newcomers; but the fact of the migration is important from this point of view. The contributions of such men, if they had become contributors to the fund, would fall into arrear. Some payments would never be resumed, while, as regards some of the accounts, the amounts paid would never be claimed, because of the condition that they could not be claimed, perhaps, for many years. This might be a slight incidental advantage to the annuity fund, but the fear of its occurrence would certainly operate against the system. Meanwhile, the non-forfeiture principle would operate against the stable contributors by making the rate of annual payment relatively high.

3. The return of the contributions to the fund in the event of the death of the contributor before he became an annuitant.

This is a method which has its advantages from the contributor's point of view, but it involves inevitably as in the last case a relatively high rate. It would appear from the English experience, as shown in the statistics of the Post Office annuities, given above, that the "returnable" annuity is more in favor than the "non-returnable" one. The "returnable" system is, however, open to this grave disadvantage, that while it involves a higher annual payment up till maturity, or what is the same thing, a smaller annuity than the "non-returnable" system, yet it involves also an element of chance. Should an intending annuitant die immediately before the first payment of the annuity became due, the whole of his payments, plus 3 per cent. interest, would be returned. If he died immediately after the first annuity had been paid, his heirs would get nothing.

I am indebted to Professor Mackenzie, of the University of Toronto, for his kindness in working out for me the following table, which shows the amount of annuity which a weekly payment of 30 cents would provide at 3½ per cent. and at 3¾ per cent. The tables have been drawn up for males only:—

Table showing the annuity (in weekly payments) which a contribution of 30 cents per week would yield, the rates of interest being calculated at 3½ per cent. and 3¾ per cent., respectively:—

Payments continued from age at 30c.	Annuity in weekly payments for life. 3½ per cent.	3¾ per cent.	
40—60	$1 13	$1 19	after 60 years of age.
40—65	1 99	2 10	after 65 years of age.
30—60	2 15	2 39	after 60 years of age.
30—65	3 94	4 23	after 65 years of age.
20—60	3 98	4 26	after 60 years of age.
20—65	6 98	7 54	after 65 years of age.

Thus, in order to obtain an annuity of $196 a year at the age of 65 a male contributor would require to pay into the fund 15 cents a week from the age of 20 to the age of 60. If he paid 30 cents a week during the same period he would have an annuity of $392, both being calculated at the higher of the two rates.

Experience of the annuity system in all countries has shown that voluntary provision for old age cannot be relied upon to prevent poverty in old age. The class which needs the provision most will not voluntarily avail itself of it. The social features of the friendly society and the pushing of business by the insurance companies supplement purely voluntary initiative to a considerable extent; yet there remains a residuum unprovided for. For this residuum the only present resort is poor relief, either through voluntary agencies or by means of a public system sustained by a charge on the community. This circumstance has led to suggestions for compulsory individual contributions during the years of active life, supplemented by State contributions and management of the funds. The objections to such a method have been already indicated in the quotations from Mr Broadhurst's report and from Mr. Reuben Watson's evidence. There is besides an overwhelming mass of evidence against it in the report referred to. The experience of Germany is not yet of sufficient duration to prove that the method can be worked satisfactorily and without contingent disadvantages of a grave character. The alternative is a system of national pensions, pure and simple. There are many objections to such a method also, but the chief objection is the enormous cost of it. Mr. Charles Booth has made a careful estimate of the cost for Great Britain. The net cost, after deducting the saving to the poor law funds, is £16,000,000, or $80,000,000 a year, a sum which is so great that the promulgation of Mr. Booth's scheme has practically silenced the advocates of old-age pensions in Great Britain for the past twelve years.

The adoption of compulsory scheme for Canada is at present, at all events, quite impracticable. While provision for the aged poor is very desirable, provision by means of national pensions is by far too expensive a method for the present phase in the development of the country.

According to the census of 1901 there are in Canada 410,411 persons over the age of 60 years, 269,388 of these being over the age of 65 years. In order to give old-age

‡ Report cited, p. xcix.

* Report cited, p. xcix.

pensions to all of those over 60 would involve an annual charge of approximately $40,000,000 if the pensions were only $100 per year; or, if the age limit were 65, the amount required would be approximately $27,000,000, exclusive of the cost of administration. At the next census the numbers will no doubt be largely exceeded. Even if on abstract grounds it were advisable to provide a State pension for all persons on attaining the age of 65, the cost of it is evidently prohibitory.

In conclusion, it seems to me that there is no genuine demand for old-age annuities in this country, and that provision for the aged poor, who are unprovided for, can be effected by voluntary charitable or friendly society agency more economically and more effectively than by a State scheme, which must either be for the benefit of a small number, and these not those who require it most, or must be universal in its application, and, therefore, enormously and unnecessarily expensive.

SMOKE TALKS

By R. C. HARRIS.

A steam boiler of insufficient capacity and bad design cannot perform the work required with economy and efficiency. Where is the business man who would not revile the proposition to hitch a single horse to a fully laden double dray with the expectation of speedy and satisfactory delivery. Yet hundreds greatly overload their boilers, thereby transgressing the elementary principles of economy and good combustion, and heedlessly violate a primary hygienic requisite by contaminating the air which their fellows inhale with harmful solid and gaseous elements.

A furnace which supplies heat to a heavily over-laden boiler will smoke despite the most careful hand or automatic firing, or the interposition of smoke preventive devices; yet the proprietor is slow to recognize this depletion of profits, which works discomfort and ill to others by reason of smoke emitted.

D. K. Clark, an eminent and accepted authority, in his standard publication, "The Steam Engine," says:—

> "Incomplete combustion and its usual concurrent, smoke, occur in different forms. Smoke may be discharged immediately after fresh fuel is charged on the fire, consisting of variously tinted hydro-carbon gases—volatilized fuel—from dark brown to light yellow, which have escaped combustion. Smoke of another kind is the result of the precipitation of carbon in an extremely divided state—condensed carbon vapor precipitated in the course of combustion, and carried away, intermixed with and giving color to the gaseous products of combustion. When the dissociated gases are suddenly cooled, as by contact with the walls or the roof of the furnace, or even by a current of cold air, the carbon vapor is precipitated and forms smoke.
>
> "Combustion is rendered incomplete in another way by the reduction of the carbon dioxide formed by the combustion of incandescent fuel with air through the fire-grate. The carbon dioxide passing upwards through a thick bed of fuel takes up another equivalent of carbon, and becomes carbon monoxide. If an additional supply of air be not forthcoming to restore the carbon dioxide, the heat absorbed in the reactive reduction to the state of oxide is lost as for the purpose of generating steam.
>
> "For ensuring completeness of combustion, the first condition is a sufficient supply of air; the next is that the air and the fuel, solid and gaseous, should be thoroughly mixed; and the third is that the elements—air and combustible gases—should be brought together and maintained at a sufficiently high temperature. The hotter the elements the greater is the facility for good combustion."

The paragraph immediately preceding spells the solution of the question of smoke abatement when applied intelligently to a plant of ample capacity, well designed, with a proper and rational proportion existent between grate area, heating surface, and stack area. The average fireman views the air supply simply as a "draft"—a mechanical promoter, rather than a supporter, of combustion, and air admission over the fire is often regarded as heresy.

To my mind the necessity for air admission is as potently and aptly expressed in the quotation from D. K. Clark in this article as is possible in the English language, and may be thus summarized:—

> Admit sufficient air below and above fire.
>
> Obtain the best possible admixture of air and fuel.
>
> Combine and maintain air and gases at high temperature.

If owners would provide adequate plants and see that firemen strive to observe the principles indicated in the foregoing summary, the market for smoke preventive devices and the necessity for smoke enactments would be inconsiderable.

In the May number I shall consider the question of firing and revert to air admission, the "general remedy."

Farm Implements for Italy.

Changes in methods of farming have created a considerable demand for agricultural machinery in Italy. The large emigration of recent years has tended to depopulate districts which formerly supported an extensive farming community. Landowners are suffering great hardships in the matter of labor. Nothing but labor-saving machinery can save the day. It is pointed out that only light farm implements would be suitable. There is much hilly country, and the horses are small. British manufacturers are beginning to turn their attention to this field. It gives good promise for an advantageous business.

Safety Devices.

A laudable work is being carried on by the American Institute of Social Service in the encouragement it is giving to the development of safety devices of all kinds. It recently held an exhibition in Chicago, and this is being reproduced in Boston and New York. The "Scientific American" has taken up the agitation, and now offers a medal to be awarded each year by the Institute for the best device invented for safeguarding life and limb. The good work is deserving of every encouragement.

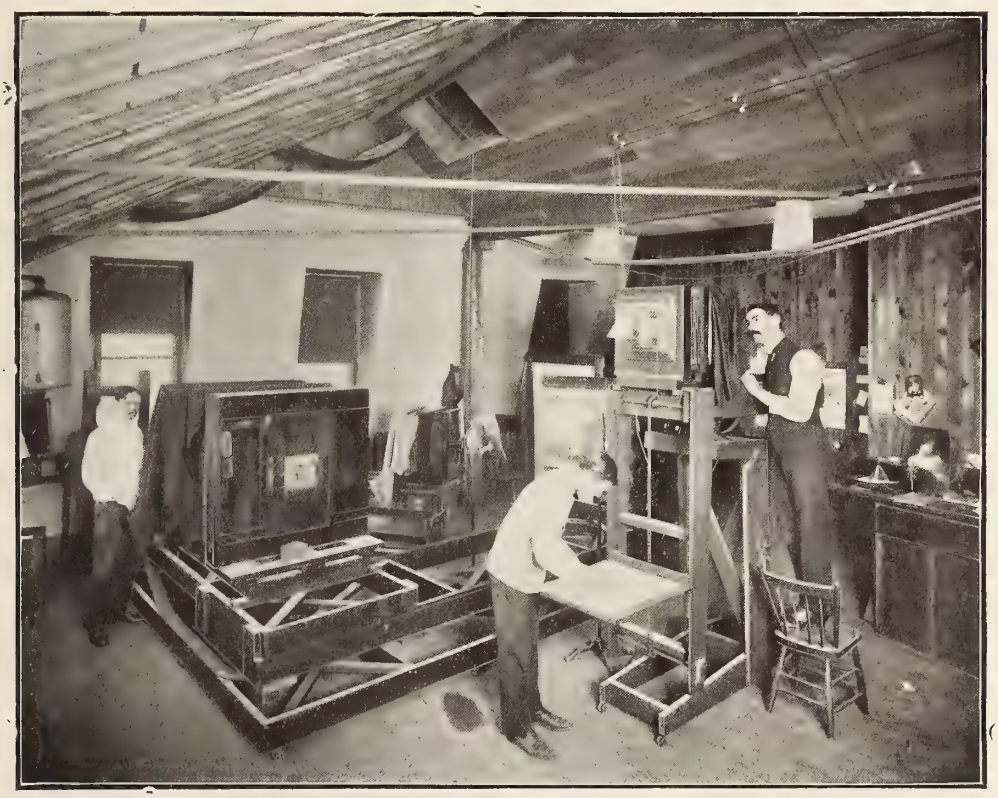
The Whitman-Barnes Company, manufacturers of sharp edge tools, who were contemplating moving their factory from St. Catharines, have decided to remain there. A readjustment regarding assessment and railway facilities has been made with the city.

HOW CUTS AND ILLUSTRATIONS ARE MADE

By GEO. BRIGDEN.

Those who have been reading the excellent series of articles on "Advertising Canadian Industries," by J. Angus MacDonald, have no doubt noticed how frequently he speaks of the process of illustrations, and impresses most strongly the importance of their being "the best." To many, no doubt, the manner of their production is unknown—to enlighten those is the purpose of this article.

Illustrations or engravings may be divided into two general classes, viz., those having photography as their base, and those evolved by the brain and hand of the artist. As the first-class is the one most generally used by manufacturers it will be more fully dealt with than the second. The past five years have witnessed an extremely rapid development of catalogue and booklet making. Manufacturers have vied with each other in their efforts to produce the most attractive and best silent salesman, for that is without question the raison-d'etre of all advertising literature.



The Photographic Department.

The Making of Half-Tones.

In order that this article may be as instructive as possible let us take the case of a manufacturer of machinery who is desirous of issuing an illustrated catalogue of his product. The first step is to have a good photograph taken. Right here is where ninety-five per cent. of the manufacturers fail. They, apparently, do not recognise the fact that upon the excellence of the photograph depends in a large measure the quality of the engraving, nor do they know that a good photo is more cheaply reproduced than a poor one. Every machine should be carefully painted a stone grey color, leaving the bright steel parts in their natural state. This gives the photographer an opportunity of obtaining a photo perfectly even in color, and free from reflections and stains which would otherwise mar it.

True this preparation consumes time and is sometimes impossible. Expeditious delivery may be imperative. But it is a money-saver in that it reduces the time that would necessarily have to be spent by the artist if a first-class illustration is desired. Art work is invariably expensive. Artists with a special training are the only ones who can satisfactorily remove defects and bring out clearly and distinctly the salient features of any machine.

When this work has been finished the retouched photo is sent up to the photo gallery, where what is technically known as a half-tone negative is taken. This is so called because it is taken in a camera in which a glass screen, made by two series of lines crossing each other at an angle of forty-five degrees, is placed between the lens and sensitive plate. The light passing through this screen produces the lines and dots evident in all half-tone engravings. The cameras used are built on a large scale, ranging in size from 12 x 15 inches to 36 x 36 inches. The lenses are specially constructed to give the detail in the sharpest possible manner and are very expensive, as also are the screens, which though composed only of ruled glass, cost anywhere from $100 to $500. The cost arises from the great care exercised in ruling the glass in an absolutely accurate manner. This ruling varies from 60 to 200 lines per inch, the photographer using such a screen as may be necessary for the class of printing the engraving may be subjected to. For all the finer classes of catalogue illustrations a screen of 150 lines is used, experience having proved that that screen renders

the finer details best and gives a plate that is more readily printed than one produced by a finer screen.

The next step is to print the half-tone negative on to a copper plate, the plate being made sensitive to light by being flowed with a sensitive enamel solution. It is now developed, and to make it permanent it is burnt in by heating over a gas stove. This makes the enamel impervious to the action of the mordant used for etching, viz., liquid perchloride of iron. A sufficient depth having been obtained the plate is handed on to the fine etchers or finishers, who carefully re-etch the brighter parts, burnish the dark tones, and engrave or tool out such parts as should show a perfectly white surface. As nearly all engravings of machinery are vignetted or have the background cut away, an engraver outlines the shape, giving the router a guide to follow when routing off the surplus metal. The plate is now mounted on a wooden base, and after an engraver has carefully cleaned the edges left by the router it is printed or proved in order that its quality may be shown to the manufacturer.



Making Illustrations.

Such in brief outline is the routine followed in producing all half-tone engravings.

Zinc Etchings.

Another process largely used by the newspapers and also for the production of pen and ink drawings, is that of zinc etching. This process, which costs only about half that of a half-tone, is frequently used for the cheaper catalogues. It permits the use of a much cheaper quality of paper, which fact is a big consideration where the catalogue is a large one and where a very large edition is issued. The mode of procedure is exactly the same as for half-tones, the difference lying in the fact that zinc instead of copper is used, and nitric acid instead of perchloride of iron.

Another process used largely by furniture manufacturers to illustrate their catalogues is what is known as wood engraving, at one time the only known way whereby an illustration could be made. In this instance the picture or article must be either drawn or photographed on to the wood; it is then engraved by fine steel tools by hand, the tints or straight lines being ruled on a ruling machine.

Electrotyping.

As wood will not stand the wear and tear of printing, the wood cut is electrotyped. To do this an impression is taken in a soft preparation of wax, which is put into an electric battery. A thin shell of copper is thus deposited on the mould. This is backed up with a softer metal when it is mounted either on wood or metal as circumstances may demand.

The Tri-Color Process.

The process which is but beginning to enter the field of catalogue illustrating, but which is bound to have a larger and larger use, is known as the tri-color process. It has been found that by the impression of three plates on one another the exact colors of any object or colored painting may be faithfully represented. It is founded on the principle that the three primary colors, yellow, red, and blue, when printed on one another, will produce any known color. So far this process has been used more for the reproduction of paintings than anything else, but is gradually entering on more commercial lines, illustrating, for instance, carpets, oilcloths, gloves, ties, wall papers, tapestries, pickle and perfume bottles, and colored objects of a like nature.

This process requires most careful manipulation from the very first, and like all the processes, has photography for its base. The article is put up on the copy board and a negative is taken by a specially prepared plate through a color cell which extracts every possible shade of yellow contained in the object; another is taken for the red shades; and lastly one for the blue shades. What is known as a transparency is now taken from the negative. This trans-

parency is then put in a kit holder before the camera and a half-tone negative is made exactly in the same manner as in the case of an ordinary photo copy. The plate is produced as described in the first part of the article, only this color work requires a higher grade of men to do the fine etching. Indeed they must be artists in temperament, if not, in fact, as they must have the proper appreciation of color values, otherwise the result is likely to be poor. For though all the previous part may have been executed properly the fine etcher may spoil the whole effect by careless work. The possibilities of this process has not begun to be recognized by our manufacturers, but as competition increases the better and more faithful presentation of their wares will be forced on them, and though the initial cost is greater, those who have already tested it say that without question there is no better investment for catalogue illustration, the returns in many cases being far beyond their expectations. The writer knows of one instance, carpets, where the dealer was forced to cable six times for repeat orders. In another case a tie manufacturer found it impossible to supply the demand, his stock becoming exhausted in three weeks.

In writing this article the writer has avoided as far as possible entering on the technical and chemical sides of the various processes, but has endeavored to give what would be an intelligible idea of the manner of the production of plates for use in the illustrating of catalogues.

CANADA'S TRANSPORTATION PROBLEM.

How can the Products of Canada be Marketed with the Least Cost for Carriage?

THERE be three things which make a nation great and prosperous. A fertile soil, busy workshops, and easy conveyance for man and goods from place to place."—Bacon.

Probably no better illustration of the above apothegm can be had than by referring to the transportation problem as it affects Western Canada.

Owing to the congested conditions that have prevailed since 1905, car shortages, etc., both in the West and the East, probably sixty per cent. of the grain crop of 1906 still remains unshipped. It is difficult to fortell what the situation will be with the increased acreage of 1907. Various schemes of storage are being advanced, but the fact seems to be overlooked that the greater national prosperity lies in getting our products to market with as little delay as possible by routes that will give the best available returns.

Vital Effect of Cheap Transportation.

The necessity for making the lowest rate on the prinicipal commodity of the country is apparent. The producer calls upon the manufacturer to supply his requirements in accordance with the value that he receives for his produce; therefore every dollar saved in transportation means that much more purchased from the manufacturer. Two or three cents per bushel saved in the transport of the farmer's crop can be easily reckoned, whereas an advance of five or even ten cents per 100 lbs. on dry goods, etc., has very little effect on the single article purchased by him.

A glance at the history of the transportation lines running through that part of the United States contiguous to our North-West is only necessary to show the rapid development of that country, the true basis of which has been the cheap means of transport for its products. Railroad building in Dakota and Minnesota began only on a large scale after the enlargement of the Soo Canal, when it was seen that they could connect with a through direct water route to Buffalo.

Water Facilities Inadequate.

In the Canadian North-West the situation is somewhat different. The railways have been built or are building, the objective point being Fort William and Port Arthur, but owing to lack of facilities east of the Lakes, 60 to 75 per cent. of our crops of the North-West finds its way to the world's market through United States channels. This is very often detrimental to the interests of Canadian exports from the fact that, especially after the close of navigation, such grain as remains in the elevators at Buffalo and New York is exported more or less as American product.

Influence of United States.

The intercourse between the United States and Canada in the West is growing year by year. Settlers are moving across the boundary, and in this and other ways the transportation problem is becoming common to the two countries, and the conditions are growing more or less sympathetic. The recent action of the Great Northern Railway in reducing the rates from St. Paul to Winnipeg by putting into effect openly the proportional rates which were previously in effect as a division of through rates, means a reduction in favor of the United States as against the manufacturer in Eastern Canada (although geographically not so). The importance of this move is apparent, indicating as it does the invasion of our Western Provinces with the primary object of diverting to the United States, trade which belongs to Canadian channels and routes.

If, however the people of Canada are compelled to look to the United States for assistance to enable them to market their crops it is fair to assume that they will not be adverse to these same lines putting forth every effort to encourage and secure traffic west and north-bound. The tendency in this direction has already been evidenced by the Tariff Commission Enquiry in 1905, and the attitude generally of the people of the North-West in respect to tariff matters.

New Routes Necessary.

The solution of the problem would therefore seem to lie in retaining to Canadian Channels the trade of this great and growing country, by opening new routes of transportation where available. Probably none of the surplus producing countries of breadstuffs is as favorably situated in respect to the world's markets as Canada. As an illustration, the average rate from New York on wheat is about 4 shillings and 11 pence, as against a rate from Odessa (Black Sea) of 8 shillings, 3 pence; River Platte (Argentine Republic) 13 shillings, 9 pence, and Bombay of 13 shillings, 1 penny. The rate from Montreal is somewhat higher at present than from New York.

As this situation might disturb alarmists who might fear an over-production, it is only necessary to say that Liverpool, to which all the wheat exporting countries of the world send their wheat, takes on an average (including wheaten flour) from 220,000,000 to 230,000,000 bushels annually. Ten years ago Liverpool looked to the United States for 70 per cent of its supply of grain. This has shrunk appreciably, and to-day the imports from the United States of wheat does not exceed 27 per cent., and the latter is the only country that can be considered as a competitor with the Canadian wheat fields.

Freight Rates and Selling Price.

Professor Hugo R. Meyer in a recent publication devotes a chapter to "Factors controlling the farm price of grain." It is peculiarly applicable to the conditions in our North-West. "As the result of the modern means of transportation and communication together with the modern system of speculation in the great agricultural staples, there is established a world's market price of wheat at Liverpool, the chief place through which the supply of the surplus wheat producing countries of Western Europe goes.

This Liverpool price is fixed at any time at the point at which total supply and total demand will equalize, and being so determined, the price at any of the primary markets in the surplus countries is a co-efficient of this price. That is to say, the world's market price at Liverpool being established as the resultant of many forces, the the local price of wheat in such leading collecting markets as Chicago, Buenos Ayres and Odessa at any time is obtained by deducting from the Liverpool price the cost of transportation, insurance and other charges.

With this data for our problem let us suppose that the total charge for laying down Chicago wheat in Liverpool were reduced from 40 cents to 30 cents per bushel. The disturbance of the pre-existing balance of forces would, if unresisted, depress the Liverpool price by 10 cents through hastening and augmenting the movement of wheat from the barn to Chicago, and from Chicago to Liverpool. But there would be brought into play certain counter-forces, which would check the fall of the Liverpool price. On the one hand the European demand would increase as the price fell, and on the other hand the supply, especially from the other surplus countries besides the United States, would decrease, or the existing stock would be held back. To satisfy the conditions of equilibrium between demand and supply the decline of Liverpool price would be arrested at the figure, let us say two cents per bushel less than the old price which prevailed before the disturbance.

Then, as the Chicago wheat merchant could sell in the Liverpool market at only two cents reduction in price, obviously the reduction of ten cents in the cost of access to that market would mean a bonus of eight cents in his pocket. But this he could not keep for himself. The forces of domestic competition would be depended upon to compel him to hand most of it on to the farmer, and the Chicago price would rise by nearly eight cents.

Thus far we have had in view the temporary effects of a reduction in the cost of transporting wheat from a particular primary market to the general world's market at Liverpool; but the same principle holds good as to the permanent effects. If an exporting country does not increase its acreage after such a reduction, it may keep its higher price and profit indefinitely, or until its competitors mistake its improvements. But if it extends its cultivation, if it takes up the slack of the cheaper means of marketing by augmenting production, obviously its price will decline and may in time stand absolutely at a lower figure than ever before. But in either case it is benefitted by the lower cost of transportation; it either does the same business at a higher price or (because it sees fit to do so) a larger business at the same or lower price.

This whole matter of a diversion temporarily or permanently of the advantage of a new economy in any branch of the trade between an exporting country is highly complicated, and in any specific case the proportions cannot be exactly determined before the event.

But it may at least be laid down as a general rule that when several sources of supply are drawn upon by a common market, a particular fall in the cost of transport from one of them will produce more local than central disturbance; will raise the price to the tributary market more than it will depress it in the uniform.

Another way to put it is to say that as long as several sources of supply are drawn upon to satisfy the demand of a common market, the price will be determined apart from the variation of seasons, by the conditions of production in the weakest of them (the marginal source) and the advantage which the stronger ones enjoy will be manifested in amounts of bonus. Apart from any special enquiry into facts and theory there is certainly no occasion to assume that a particular reduction of the cost of transportation of wheat by American railways or Russian railways or Argentine railways—as the case may be—redounds exclusively or even chiefly to the benefit of the European consumer."

Solution Lies in Waterways.

Canada, with its immense resources—agricultural, forest and mineral—must necessarily be an exporting country of raw material. Therefore, in order to develop these resources to the fullest extent every effort should be made towards providing the cheapest method for getting them to market. In this she is favorably situated in her available waterways. Already many improvements have been made in these natural routes to the seaboard. Further development, however, is now necessary in order to give to the country the advantage of its great wealth.

The advantage of large waterways open to the use of all carriers cannot be underestimated. The element of free competition regulates the rates of transport proper, and under such circumstances the charge for transportation must tend to approximate the net cost. There is not only the reduction in rates from which benefit is derived, but the influence which is brought to bear in regulating railway rates and charges.

In this connection a glance at the map will show the advantages offered by the Georgian Bay Ship Waterway via the Ottawa River, not only in affording the shortest through route via the Great Lakes from the North-West to the seaboard with the advantage of lake transportation without breaking bulk, but in tending to increase interprovincial trade in making possible the development of our mineral and other resources by the cheap transportation of coal from our mines, creating new manufacturing and distributing centres and increased population, and adding to the traffic seeking transportation by the railways.

—The growing importance of our mineral development has been reflected during the past month in a new paper devoted to mining. "The Canadian Mining Journal," which is a fortnightly publication, will have a large field in which to work. There are few people who are not interested directly or indirectly in mining. Hence a reliable paper outlining the development of the new fields and giving authoritative technical information on the subject is sure of a good reception. The publishers have combined with the "Journal" the "Canadian Mining Review of Montreal."

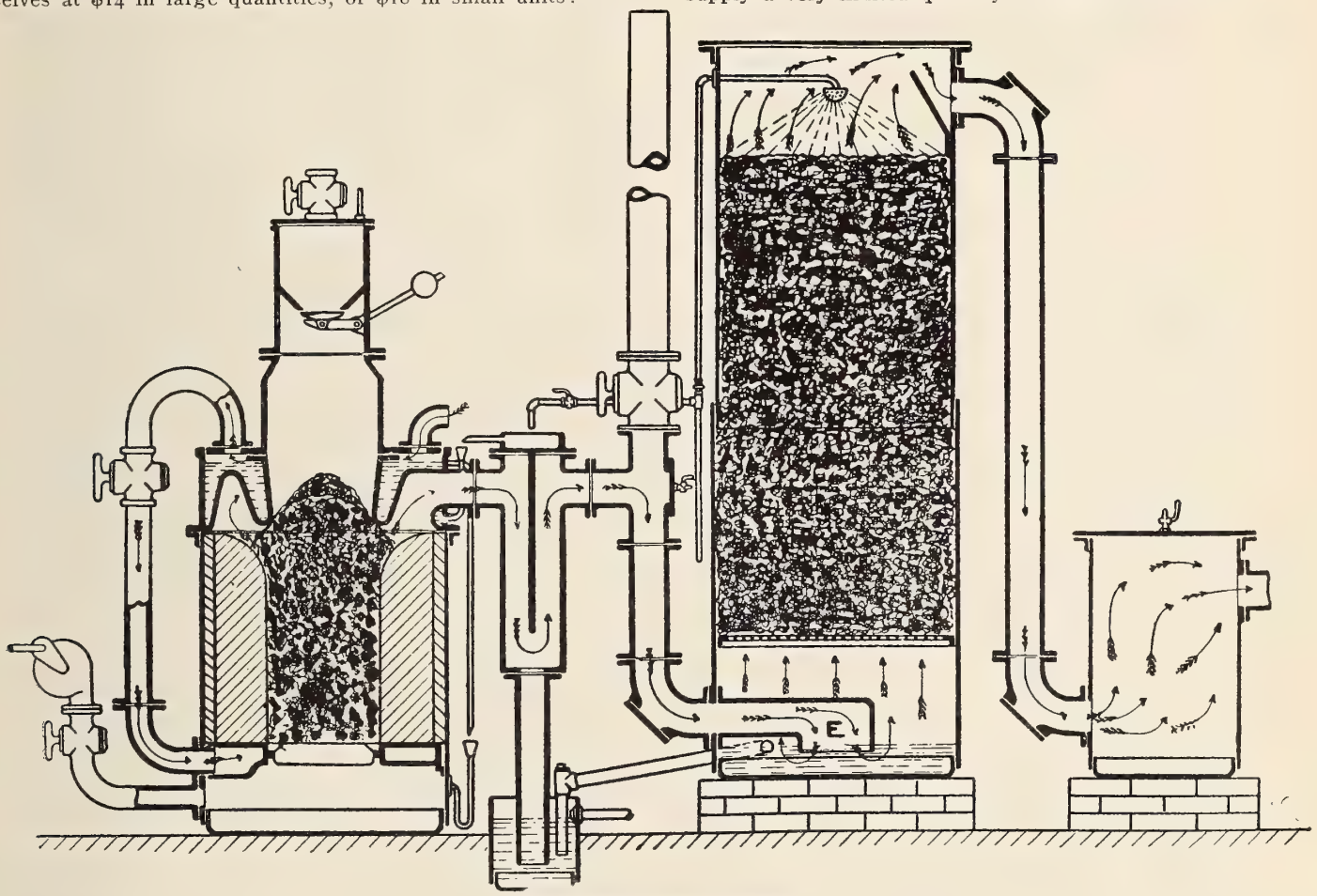
According to recent reports the demand for Canadian flour in the Orient is on the increase. One company alone has orders for shipment by every boat sailing from now until the end of June. This will prove a valuable outlet for the grain of Alberta when that Province begins to raise a large surplus crop.

PRODUCER GAS CONSIDERED COMMERCIALLY.

By G. P. WALLINGTON, C.E., Manager of the Producer Gas Co.

PRODUCER gas, about which so much talk, thought, and work is being devoted in England, France, and Germany, is now gradually verifying the prophesies of many eminent engineers of the past, that it is to be the coming power of the future, supplanting steam—yes, and even water power, for where do you hear of $14 per h.p. per annum even promised? Yet this is the figure that best bituminous plants are giving to-day in England.

Why is Canada behind the times? Why are our manufacturers waiting anxiously to hear if Niagara power can be gotten at $22 when they can make their own power for themselves at $14 in large quantities, or $18 in small units?



Plan showing Interior of Plant.

Producer gas is the name given to a gas obtained by passing air and steam through a fire of coal or coke by which we get a gas, which is a heterogeneous mixture of many chemical formulas—not very pure, not very rich—but very, very cheap, and which, when used in a gas engine, yields nearly 20 per cent. of the original heat in the coal available for useful work, against only about 12 per cent. given by the best steam engines and boiler.

The apparatus is quite simple. It consists of:—

(1) THE GENERATOR.—A plain, cylindrical vessel, like a vertical boiler, without a chimney, lined with fire-brick, and having a grate like a boiler. Into this is put a deep bed of coal, which is burned on the grate precisely the same as in a domestic heater boiler, except that the coal is fed in at the top through an air-excluding device instead of in the front.

(2) THE VAPORIZER.—This is merely a vessel to hold the water to be turned into steam, which, after being mixed with air, is fed below the grate of the generator. The vaporizer takes many forms in the various designs of plants. Sometimes it takes the form of an annular trough on the top of the generator, as in the illustration of the Campbell gas plant, here shown; sometimes it is separate from the generator altogether, being merely an annular space surrounding the pipe by which the hot gas leaves the generator; but its object is the same in each case, namely, to supply a very limited quantity of steam to the fire.

(3) THE SCRUBBER.—This is also a plain, cylindrical vessel (almost twice as high as the generator). This is filled with ordinary coke, over which water is sprayed. The gas passes up through this coke, where it is cleaned and cooled before passing to the engine. In the large plants a sawdust scrubber is added. This is merely a large box or vessel filled with sawdust, with baffle plates to make the gas take a torturous course, and be thus further cleaned and dried. The gas then passes to the engine, by which it is:—

(1) SUCKED IN;
(2) COMPRESSED;
(3) EXPLODED; and,
(4) EXPELLED.

The explosion constitutes the working stroke from the cylinder in the two revolutions which it takes to complete

these four cycle operations, which is commonly known as the four cycle, or Otto gas engine cycle, which is the cycle that most of the larger engines are now worked on.

The make of engine is a very important matter to be considered in the installation of a gas plant. It is well to bear in mind this very important fact that, while a gas engine up to say 15 h.p. is merely a manufacturers' proposition, when you get into the larger powers it gets very much into the experienced engineers' domains, and it is well to select an engine made by a firm of engineers who have had considerable experience in engines of larger powers. If this is done, gas power will give no more trouble or inconvenience than the best steam engine made to-day.

We have thus seen that producer gas is not the highly scientific, experimental thing which is the popular notion, but a simple, easy and most economical method of converting the heat units stored up in coal into useful work.

It is interesting to consider how all work is merely the conversion of heat units; even water power, the white coal of Canada, which is, of course, merely the utilizing of the sun's rays, which have drawn up the water in vapour and dropped it again at a high level. This sounds a fascinatingly cheap form of getting power, but which is, we are given to understand, to cost something over $20 per h.p. per annum when all is said and done.

The trouble with producer gas in Canada in the past has been the lack of skilled men in this class of work. Manufacturers have, perhaps, decided rightly, in the words of the old saying:—

"That a devil you know is better than a devil you don't." But this is changed. We now have many men in this country who have gone through the mill in all kinds of producer gas power in the various European countries where it has been perfected, and we have factories opening up here that are already making a specialty of it.

We give below a table taken from W. A. Tookey's excellent book on "Gas Producers," which was compiled from Mr. H. A. K. Clark's lecture at the Leeds meeting of the Institution of Mechanical Engineers, July, 1903. This may interest those contemplating the putting in of power. The figures are translated into dollars and cents from the original figures in sterling.

The relative prices of coal in England being given as anthracite coal used in suction plants, 24s. = $5.87 per ton; steam coal, 12s. 6d. = $3 per ton.

TOTAL COSTS IN POWER PRODUCTION.

	Gas Engine.	Steam Engine.	Gas Engine.	Steam Engine.	Gas Engine with bituminous coal gas plant.
1. Means of production					
2. Brake Horse Power	35	35	160	160	160
3. Size of engine room	12x20x15	10x20x15	20x27x20	17x27x20	20x27x20
4. Size of boiler house and producer	10x6	14x40x15	20x10	20x48x20	30x15
5. Cost of land at 14c. per square yard	$68.00	$150.00	$140.00	$280.00	$192.50
6. Cost of buildings	500.00	1150.00	1000.00	2100.00	1000.00
7. Engine foundations, etc., boiler settings	50.00	300.00	175.00	500.00	175.00
8. Engine tanks, pipings and condenser, etc.	1400.00	1200.00	5700.00	4000.00	5100.00
9. Boiler or gas producer and accessories	600.00	1450.00	1350.00	3000.00	2500.00
10. Total capital cost	$2618.00	$4250.00	$8365.00	$9880.00	$9567.50
11. Capital cost B H.P.	69.08	121.43	52.29	61.25	59.80
Annual charges—					
12. Interest on capital 4 per cent	96.72	170.00	334.60	395.30	382.70
13. Building maintenance and depreciation 5 per cent	25.00	27.50	50.00	105.00	50.00
14. Engines and machines maintenance and depreciation 10%	140.00	120.00	570.00	400.00	570.00
15. Boilers 12 per cent		176.00		360.00	
16. Gas producer dep. 5 per cent.	30.00		67.50		125.00
17. Fuel	250.00	650.00	950.00	2220.00	390.00
18. Lubricant, waste, etc.	100.00	100.00	275.00	275.00	275.00
19. Wages, removal of ashes	375.00	475.00	437.50	700.00	437.50
20.	$1016.72	$1718.50	$2684.60	$4455.30	$2230.20
21. Annual cost per B.H.P.	29.05	49.00	16.78	27.85	13.94
22. Cost per B.H.P. per hour	.104	1.74	.58	.98	.48

The Growth of Our Railways.

The first report of the new statistical branch of the Department of Railways, of which J. Lambert Payne is the comptroller, has just been issued. The statistics are compiled from sworn statements supplied by the railways, and it is noted with satisfaction that not a single railway made default this year in the submission of statistical data.

It was deemed important to make a digest of the statistical information, which had been issued from year to year since 1875. The tables, which are presented for the first time, represent a history in figures of the growth of the rail way business in Canada. The tables give many interesting figures showing the development of Canadian Railways since 1875, including the following:—

	1875.	1906.
Total mileage	4,804	21,353
Locomotives	980	2,931
First-class cars	488	1,289
Second-class cars	277	716
Baggage cars	235	842
Box cars	12,843	61,929
Platform cars	6,404	18,525
Coal cars	1,050	8,295

In 1875 the volume of traffic was 5,786 tons of freight and 5,296 passengers per locomotive, as compared with 19,773 tons and 9,549 passengers in 1906.

INSURANCE COMPANIES' DEPOSITS.

What is the Deposit for? Why should Mutual Fire Insurance Companies be obliged to put up a Deposit?

THE term "Deposit" in connection with Insurance Companies has been brought into prominence the past few weeks, owing to the effort to obtain Dominion Charters for the two proposed Mutual Fire Insurance Companies under the indirect auspices of the Canadian Manufacturers' Association.

The charters asked for being exclusively for Mutual insurance amongst manufacturers for loss by fire and lightning, it was claimed the "Deposit" should not be exacted.

The Joint Stock Fire Insurance Companies actively and persistently opposed this contention on the ground that the Companies should not be allowed charters on terms claimed to be more favorable than those prescribed by the Insurance Act for other Canadian Insurance Companies.

The view of the Joint Stock Companies prevailed, and the two proposed Mutual Companies can only be organized when they have complied with the provisions of the "Insurance Act." In other words the influence of the Stock Companies, tariff and non-tariff combined, was too strong to get special charters through the Dominion Government on any other terms than provided in the "Insurance Act."

Provisions of the Insurance Act.

To properly understand the situation it is necessary that the provisions of the Insurance Act should be stated. They are:

1. Every Company before transacting business must obtain a license from the Superintendent of Insurance.
2. Before a license can be obtained Companies organized in Canada must "deposit" $50,000 in certain securities specified in the Act. Companies organized elsewhere than in Canada must similarly deposit at least $100,000.
3. If it appears at any time that the **reinsurance value** of its outstanding risks, and other liabilities in Canada exceed its assets in Canada including the "deposit" in the hands of the Minister, the Company must make good the deficiency within sixty days.

Difference Between Canadian and Foreign Companies.

To the average reader the effect of the last named condition will not be quite clear, and a word or two of explanation may not inappropriately be given.

A Canadian Company having only a "deposit" of $50,000 with the Government may have a total liability of $250,000, and the Act requires that the Company shall have assets, in addition to the deposit, of at least $200,000, which may be in the keeping of the Company **not invested in any particular way nor under the slightest control of the Government.**

A foreign Company having the same total liability of $250,000 must "deposit" at least $250,000 **in approved securities with the Government and under their direct control.**

What Are a Company's Liabilities?

In the last two paragraphs we have used the expression "total liability," and that term had better be explained in passing. What constitutes a Company's "total liability?"

1st. The "reinsurance value" of its outstanding risks.
2nd. Fire Claims unpaid whether adjusted or not.
3rd. Open accounts.

What is Meant by "Reinsurance Value?"

It is important to determine what is meant by the term used in the Insurance Act above quoted, the "re-insurance value."

In effecting insurance with a Stock Company it is, as everybody knows, a part of the contract that the Premium must be paid in cash **in advance.** Let us use a concrete example to illustrate the bearing of this on the question of the "reinsurance value." "A" takes a policy for $5,000 for one year from July 1st, 1906 to July 1st, 1907, and pays a premium of $80.00 therefor. On December 31st, 1906, "A's" policy has run six months and has a similar term to run, consequently the Company on that date has earned $40.00 and owes "A" $40.00. "A" on his part in making up his assets as at that date is quite entitled to take credit for $40.00 premium paid in advance. The company therefore holds $40.00 of "A's" money in trust because it has not, at that time, been earned. That sum of $40.00 is the "reinsurance value" of his policy. Now "A" is typical of all the other policy holders, for every one of whom the Company is holding in trust a greater or less proportion. The aggregate of all these sums represents the "reinsurance value of its outstanding risks." In the Government Blue Book the term used, under the head of liabilities, is "Reserve of unearned premiums for all outstanding risks in Canada." If the reader will bear in mind that these two terms are synonymous it will, in the light of the explanation just given, simplify an understanding of the whole subject of "Deposit."

What is the "Deposit" For?

It is now in order to put and answer the question, what is the "deposit" for? The answer is quite simple. Inasmuch as all Stock Insurance Companies owe to their policyholders greater or less sums of money, the Government demand is that the aggregate of the sums so held by the Companies, in trust, must be covered and protected by "depositing" with them securities of the character stated in the act, the market value of which shall be enough to either return the money they owe to the insured or to pay to another Company for the purpose of assuming the liability for which the insured have paid in advance. The Company has no right to use this unearned premium in the discharge of its other obligations to the detriment of the policyholder, nor has the Government the right to allow the use of the "deposit" until its primary purpose has been fulfilled.

The secondary purpose of the "deposit" is to guarantee the payment of losses, and amounts due to other creditors, but we again repeat with special emphasis that only that which is left, after the fulfilling of the primary or preferential object, can be utilized for this purpose.

A Challenge.

We know that misconception generally exists in regard to the purpose for which the "deposit" is held, and it is also apparent that even the Chief Executive Officers of some of the Companies hold different views on the subject. We believe this is largely owing to the lack of proper consideration, but if an opposite opinion has been reached by anyone we shall gladly find room for the exposition of any contrary views. The right of the subject is important, and our columns are open to all, particularly to the Managers of the Insurance Companies, who may desire to assist in the elucidation of "what is truth."

Why Should Mutual Companies be Required to Put up a "Deposit?"

We are now ready to consider the further point as to why a "deposit," as we have stated its purpose, should be required of Mutual Fire Insurance Companies.

The only reason that can be adduced is stated in letters that were sent out by the Insurance Companies to their Agents and Representatives about March 1st, wherein they were asked to communicate with their representative or some member of the Government opposing the granting of the charter to the two proposed Mutual Companies and in these terms:

> The Manufacturers are constantly advocating protection, and we have claimed that it is unfair to the Companies which have an organization **and made large deposits** as required by the Insurance Act for the Government to permit the Manufacturers to organize an Insurance Company **on terms more favorable** than have been accorded to us.
>
> In the discussion of the bills some promoters stated one object among others was to cut out the the Agents' commission.
>
> It is for you to consider whether your interests would be promoted by the passing of the Acts desired, and if you think you would be injured, to request your Representative in the Dominion Parliament to oppose as best he can **any unfair or special terms being granted**.
>
> No objection is taken to the Manufacturers organizing an Insurance Company, **but it should be on the same terms as the others have to submit to.**

The dark-faced letters are ours as bringing out and emphasizing the only reason that has been adduced, although the reason has been urged to its fullest possible limit. This reason, which may be summarized as **equality of treatment** would be entirely good and sufficient if in other respects there was equality in the nature, character, and treatment of the business transacted. As it is the reason is weak and utterly fallacious as we shall try to show.

Difference Between Stock and Mutual Insurance.

As a matter of fact, which even the writer of the letter we have above quoted must admit, Stock Company insurance is altogether different from Mutual Insurance, as different as day is from night; there is no common basis upon which they meet, there can therefore be no question of equality of treatment for a business conducted on such entirely different principles. What are the differences?

1. The Stock Company is exploited for the benefit of its shareholders obviously to make money. The Mutual Company is an Association of men, having similar risks, for the purpose of insuring one another, each contributing to any loss that may be sustained.

2. The Stock Company collects its premiums in advance, and, as we have shown, because it holds certain unearned portions in trust for its policyholders it must protect them with a Government "deposit." The Mutual Company makes its assessments as necessary to meet losses and expenses. It holds no premiums in trust, and there is **therefore nothing to protect by a "deposit."**

3. The Stock Company in consideration of a fixed payment undertakes to pay a fire loss to the amount of its policy without any further liability on the part of the policyholder. The Mutual Company makes every policyholder liable for five times the amount of his basic premium. Mutual protection inevitably means mutual liability.

4. The Stock Company takes a premium to pay losses, expenses and a profit. The Mutual Company is more interested in preventing the happening of a fire.

5. The Stock Company transacts a general business and is subject to conflagration losses. The Mutual Company insures a particular class and freedom from possible conflagration is its vital and fundamental requirement.

As there is no common ground upon which these Companies meet the talk of equality of treatment is all nonsense, while the second difference we have shown to exist is in itself and without any other collateral consideration, strong enough to put to ridicule the claim of the Stock Companies for a common and equal treatment in matters of "deposit."

Equality of Treatment.

The letter we have quoted above was written and sent out by "foreign" Companies. It may also have been sent out by Canadian Companies, members of the Canadian Fire Underwriters' Association, but while a number of the letters have been sent in to our office we are not able to say definitely that such was the case.

The similarity of the letters leaves no question but that they derived their inspiration from a common source. It is equally certain that meetings of the members of the organization known as the C. F. U. A. were repeatedly held to formulate opposition to the audacious effort of the Manufacturers to organize Mutual Companies of their own without putting up a "deposit." We may be told that the C. F. U. A. did not take any official action, perhaps not. There is not much difference, however, between meetings of the Association, and unofficial meetings of the members of the Association called by the Officers thereof. Without splitting hairs, official or unofficial meetings were held, and in these meetings Canadian and Foreign Companies met "cheek by jowl."

It is, too, equally certain that both classes of Companies met in a spirit of loving Association to join forces to oppose the Manufacturers' Bills. At the meetings of the Banking Committee these forces were represented at different times by the Managers or Agents of the following Companies:

British Companies:—Union, Phœnix of England, Royal, Norwich Union. United States Companies:—Aetna, Home, Phenix of Brooklyn, Queen. Canadian Companies:—London Mutual, Montreal-Canada, British America, Western. The Manager of the "Union" admitted in reply to a question of Mr. Ames, M.P., that he appeared in the dual capacity of Manager of his Company, and as Vice-President and Chairman of the Legislation Committee of the C. F. U. A. Mr. J. B. Laidlaw, the President of that body was also present.

With singular unanimity these powerful insurance Magnates meet to protest against anything else than "equality of treatment." We have already shown that there is no common ground between the two classes of insurance and that there can therefore be no question of equality. We now make the statement that the opposition on this ground was evidently and palpably insincere and inconsistent for

Unfair Treatment Already Exists Amongst the Companies Which Opposed the Manufacturers' Bills.

It is well known that the organization known as the C. F. U. A. embraces within its fold all British and United States Companies doing business in Canada as well as several Canadian Companies. Other Canadian Companies not in the fold are commonly called "non-tariff." Amongst the members of the Association is the "Waterloo Mutual," a Company which transacts both a cash and a Mutual business. On December 31st, 1905, it had in force $23,537,956 on the Cash plan and $8,232,099 on the Mutual system, a total of $31,770,055. It had a "deposit" with the Ontario Government on account of its Cash business of $15,100, Moreover, this Company, is allowed to compete with its fellow members in the Association by writing dwelling risks on the cash plan below the rates at which its associates are allowed to do so, and on other classes of risks, on the mutual system, at any figures it pleases. It has **no deposit** for the business written on the mutual plan.

How inconsistent it is to oppose the Manufacturers' Bills, when within their own fold they are daily associating with a Company which is granted special terms both as to "deposit" and "rates!"

But that is not all. Every Canadian Company doing exactly the same kind of business as the British and United States offices has, under the "Insurance Act" an unfair advantage. This can be best shown by the figures of a few Companies side by side, thus:

Name of Company.	Amount at risk.	Premiums 1905.	Reserve for unexpired risks.	Deposit at market value.
British—				
Norwich Union	$ 45,227,885	$ 535,614	$361,132	$ 369,000
Phœnix of London	74,730,193	925,110	620,745	579,952
Royal	116,325,224	1,226,569	868,297	1,184,230
Union	47,500,236	539,750	404,533	444,401
United States—				
Aetna	22,980,550	263,826	167,483	186,728
Home	21,532,216	328,482	185,365	319,000
Phenix Brooklyn	18,399,694	274,999	161,381	157,840
Queen	47,335,969	579,063	389,874	409,961
Canadian—				
British America	55,821,487	470,969	418,275	62,286
London Mutual	67,605,894	458,211	480,191	56,820
Montreal Canada	26,714,297	231,025	187,635	60,000
Western	58,296,295	588,121	459,531	93,863

What is the meaning of these figures? That gross inequality already exists amongst Companies transacting the same class of business in precisely the same way. To this condition of things the men who opposed the Manufacturers' Bills submit with the meekness of cooing doves, but when Companies proposing to transact a different class of business in an entirely different way desire to be recognized in Canada these gentlemen in righteous indignation exclaim, "make them submit to the terms we have to submit to;" whether just or not, whether applicable or not.

Same Companies Submit to Unequal Treatment Elsewhere.

Of the twelve companies of which information is given elsewhere, ten do business in the United States. To do business there they must submit to conditions much more onerous than are imposed by our Canadian authorities, and yet if their cry of "unequal treatment" is just and reasonable they are submitting to it in the United States in much more aggravated form without the slightest murmur or complaint. There are hundreds of Mutual Fire Insurance Companies legally doing business in the United States; there are at least one hundred Mutual Fire Insurance Companies transacting business exclusively amongst Manufacturers and not one of them puts up a dollar of deposit in any State in which they are organized.

If there is anything unfair in what was asked by the Manufacturers why do these ten Companies, and others also represented in Canada, sit in absolute quietude at the much grosser abuses from which they "suffer" in the United States?

What Does the Opposition Really Mean?

In summing up the whole argument is it unfair to take a peep beneath the surface to ascertain, if possible, what is the real reason for the excitable opposition offered to the Manufacturers' Bills?. We think it may be found in the following conclusions:

1. Mutual Fire Insurance amongst manufacturers has been phenomenally successful, in a large way, in the United States, and to a limited extent in Canada, as we shall make some effort to show in our next issue.

2. The Stock Companies associated together in the C. F. U. A. have for years extorted rates and premiums from the Manufacturers that have created for them out of that class of business large profits, which they cannot justify.

3. So long as there is no opposition and no other adequate system of insurance these Companies will maintain and perpetuate the gross abuses they have so long imposed upon the Manufacturers.

4. The proposed Manufacturers' Insurance Companies mean the inauguration of a system that will deprive the Stock Companies of some portion of what they are pleased to believe their legitimate and royal preserve.

Therefore

at all cost the Manufacturers' Companies must be killed and the surest way to do it is to make them comply with the same conditions that are "imposed upon us," right or wrong; just or unjust.

The Great Question.

What have the Manufacturers of this country to say to it? That is the question that must come home to the members of the Canadian Manufacturers' Association and which in their own interests they must be prepared to answer.

CORRESPONDENCE.

"Industrial Canada,"
Toronto.

Gentlemen:—

I have read your article "A Compulsory Eight Hour Day," in the February issue of "Industrial Canada." It brings to my mind the fact that as a general thing it is when a country is working short time in its manufactories, that it is seeking most for export business, and is able actually to export and compete with foreign countries in spite of the fact of its working short hours. We have only to recollect the depression in the U. S. A. of 1903 and the period following, when the American people commenced to export iron-working machinery to a much greater extent than they ever did before, showing that they were able under a seven, eight and nine-hour system as the case happened to be to compete with the world. But in doing so the workman and manufacturers received less earnings than they had been receiving previously when times were good. To my mind the shortening of the working day, or in other words the lessening of the output of the day, can have, broadly speaking, but one effect, and that is the lessening of the earnings both of the employer and of the employee. This lessening of earnings would be in direct proportion to the decrease in the production. To my mind the whole population of Canada is like one large family; and whatever that family produces it has to consume, or exchange with others. I often use the farmer as an illustration. If he works ten hours a day on an average, he produces twice as much as if he only worked five. Therefore, he has twice the goods to sell, or rather to exchange for other people's products. It is impossible to get from this result. What the world produces, the world consumes. If the world at large were to work half the hours it now works and only to produce half what it now produces, there would only be half the goods for the world to consume, no matter how high wages went.

While my views are such as I have herewith described, I am not so strongly opposed to a reduction of the working hours as many are, nor do I look for great calamity in the event of a reduction taking place, even though only Canada adopted the shorter time. I think that everything would even up so that business could go along just as well as it is going to-day; but of course, employer and employee would have to accept the lessened earnings, therefore they would have less clothes, furniture, comforts, etc.

Yours truly,
J. J. Stevens.

Comparative Economy of Producer Gas and Steam.

It is known in a general way that a good producer-gas engine plant will yield a horse-power upon about one-half the amount of fuel that is necessary to generate one horse-power with a steam plant. The relative efficiency of gas and steam has recently been made the subject of analysis by a well-known pioneer in the field of producer gas, J. M. Emerson Dowson, who bases his comparison upon a steam and gas power plant, each of a capacity of 250 horse-power. In the case of the steam plant, he finds that of 1,120 heat units contained in the fuel, 224 units are lost in radiation, flue gases, ashes, etc., and that 896 units appear in the steam that is generated. Of this amount, 112 units are lost by condensation in the pipes, etc., leaving 784 units that are supplied to the engine. Of these, 667 units are lost in the exhaust, leaving only 117 units to be converted into work in the engine. Of these, 17 units must be deducted for engine friction, leaving only 100 units, out of 1,120 originally in the fuel, available for useful work on the engine shaft. In other words, in order to obtain 100 heat units in useful work on the shaft of a steam engine, there must be 1,120 heat units in the fuel burnt up in the boiler.

A similar investigation of the producer-gas plant shows that there need be only 525 heat units in the fuel consumed in the producer to give 100 heat units of useful work on the engine shaft. In the producer-gas engine 105 units will be lost in radiation, etc., from the gas plant; 126 units will be lost in cooling the engine; 177 will be lost in the exhaust, and there will remain only 117 units to be converted into work in the cylinder, of which 17 will be lost in engine friction, finally leaving 100 units to perform useful work. This comparison shows a saving in fuel of 53 per cent. in favor of the producer-gas plant. A comparison by the same authority of two 40-horse-power plants, gas and steam, shows a saving of 70 per cent. in favor of the gas plant. Excellent as is the economy of the gas plant as shown by these figures, it must be noted that the heat losses are still very large, and future improvement in economy must be looked for mainly in this direction, both in the gas plant and in the engine.

New Apprenticeship System.

The scheme of apprenticeship introduced by an English firm of agricultural implement manufacturers is described in a recent report of the United States Consul at Nottingham:—

"The rule in this country is to bind a boy for seven years, from the age of 14 to 21, during which period he leads a narrow, treadmill life. The Lincoln firm, however, takes apprentices at any age between 15 and 22—one inducement to this change being the expectation that boys of 16 to 18 will have had a good school education and will therefore be better fitted than a boy at 14 to master the trade. To encourage boys at 16 to 18 years to become apprentices, the same wages will be paid them as if they had begun at 15."

But the most important part of the Lincoln firm's new apprenticeship system is to give all deserving apprentices a varied shop experience, and to supplement the shop work with courses of instruction bearing directly thereon. By combining mental training with shop work it is believed that more intelligent workmen will be evolved than under the old system. The general scheme is thus outlined:—

"Apprentices will be moved from one class of work to another at the discretion of the firm. Diligence, skill, and proficiency will be held to constitute a claim for transference to another class of work. Keeping a boy on routine work simply because he has become skilful at it will, so far as possible, be avoided.

"All apprentices are under a superintendent, whose sole duties are to supervise, teach, promote, and advise. The firm maintains its own school in the works, and all apprentices can attend classes free; books and utensils are provided by the firm. Officials of the firm take part in the work of teaching the apprentices, and in general deal with subjects in which they are specialists. It is among the duties of the superintendent to prevent an apprentice from 'drifting' through the works, to protect boys from favoritism or the opposite in the works, and to report to the firm cases of merit or demerit."

The Canadian General Electric Co., Limited, describe their appliances for ironing by electricity in a booklet recently issued.

THE MODEL FACTORY

By H. L. C. HALL, Fellow of the International Accountants' Society.

A series of three articles on "Factory Organization and Factory Management" of which this is the second. The first article appeared in the February issue of "Industrial Canada."

RECORDS OF EXPENDITURES.

OUR records must be so kept that a glance at them will show the purpose for which any given expenditure was made. To this end no payment will be made without the proper authorization, and this may very appropriately take the form of a voucher.

In its ordinary form a voucher is simply a statement of the amount to be paid, with spaces for the signature of the proper authority and for the signature of the payee. On the back of this form is placed a ruled blank for the tabulation of the account or accounts to which the amount is to be charged. It will be unnecessary to illustrate this form here, for it is well known and commonly used among Canadian establishments. The exact form varies with the needs and tastes of the user.

In another form the check and the voucher are combined—the "voucher check." In this form the check is simply printed or engraved on the reverse side of one half of the document, the other half of the same side being reserved for the distribution tabulation above mentioned. A dozen different forms of both of these will be obtainable as samples on application to any of the commercial printers of our cities, as they are now standard articles.

This latter form of voucher has the disadvantage of withholding the final entry of the amounts and charges until the check is paid and returned by the bank. This always means delay. In the use of this form it is customary to consider the amount as paid at the moment the check is drawn, and the voucher is kept track of by means of a "voucher record," which is kept numerically, each voucher and its accompanying check bearing a designated number, which also serves the purpose of an identifying number for the check itself.

The separate voucher labors under the disadvantage that the party to whom it is sent does not always return the voucher as promptly as possible. Failure to return the voucher is productive of extra work, for written or printed requests must be sent to the recalcitrant party.

Powerful and influential concerns sometimes "take the bull by the horns" by forwarding the voucher alone in the first instance and demanding its return in advance, properly receipted, payment following such return. This plan is often followed by railway companies and by Governmental Departments, but is a little difficult of enforcement by ordinary mortals, because there is a little feeling against receipting in advance for payments.

By the use of vouchers and the voucher system it is possible to do two things: First, to do away with the necessity for making a ledger entry for every small bill which is presented to us; and second, to properly and accurately distribute the burden of the cash expended among the various accounts on the books, and this latter is an important item in connection with cost figures.

The tabulation form on the back of the voucher should include, if possible, a printed reference to each account to which expenditures may be charged, these accounts being indicated by number, letter, or a combination of the two as may be convenient. The printed reference is suggested because it is always a saving of time to print all matter which can be printed, and thus save as much writing as possible.

By the above means a bill which covers materials or other items of expense which are to be borne by various departments or accounts may be split up into the various entries, the amount of each charge being noted in its proper place on the tabulation mentioned, the total agreeing, of course, with the total of the bill or bills to be paid.

Where the account is with a concern from which purchases are frequently made, a voucher may be drawn for the total amount of the month's purchases instead of a separate document for each bill. By this means there is a considerable amount of work saved, enough to more than make up for the extra labor of drawing the voucher. Where this plan is adopted it should be made the invariable rule that there is to be no payment made without a proper voucher, as that will result in a record which will show the application of every penny of expenditure. Under this plan it is best to bank every dollar of receipts and to dispose of cash only by check, so that receipts of cash and bank account must necessarily balance. When small amounts of cash—"petty cash"—are wanted, a check and voucher are drawn therefor and recorded in regular form. This is the starting point of a perfect system of records, and a strict adherence to the plan cannot be too strongly recommended

The various accounts to which expenditures will be charged vary with different business, but in each case there will be an account with "materials" and an account under the head of "Manufacturing." If the nature of the business will permit it—and there are very few lines where it will not be possible—it is advisable to maintain the stores or material account, so that a perpetual inventory will be the result. This perpetual inventory may be checked up or verified in part from time to time merely to guard against unexpected waste, shortage and loss. For instance, the perpetual inventory will show at all times the quantity of a given article which should be in stock. In the same manner a cash account will show at all times the amount of cash which should be on hand. If the correct amount of cash is not on hand, it shows that there is a leak somewhere, and that leak should be promptly discovered and stopped. In the same way, if the amount of stock of a given sort actually on hand is not the same as shown by the records, there is a leak there, and the sooner the thing is investigated the better. Stock cannot get away any more than cash can unless there is carelessness or theft—and either one must have a stop put to it. Waste there will be, but the item of waste is almost always a constant factor, and thus is very easy of determination. Forms for the records of a perpetual inventory and for the necessary accounts as noted here will be shown in the shape of a complete demonstration later on.

The Factory System in Actual Use.

The actual work of a factory begins with the buying of materials, and if there is to be anything like a complete system the record must start at this point. In all cases the request for the purchase of materials will start with the

stores department, for in theory we will go to the store-room for what may be wanted in the conduct of the plant. In practice the stores department will be notified in advance of the anticipated need for any given article in order that it may be on hand when needed, and this is a point not to be overlooked without considerable loss through delay. If an item is wanted it is the most natural thing in the world to ask for it at the store-room. It is the easiest thing in the world to provide that the request be made in writing. Here is the first step toward our records. It takes no longer to write our request to the keeper of the stores than to communicate it by word of mouth, and it even saves time, for when the request is a written one it may be transmitted at a convenient time and by any convenient messenger, thus saving the time of the responsible party making the requisition. Provide a form of requisition which can be conveniently carried about by the foreman in the shape of a pad or small book if convenient, and the needed supplies can then be ordered without resort to his desk. And incidentally it may be mentioned that the place of a good foreman is on the floor of the shop, and not at a desk as a general thing. A convenient form of requisition is shown in Fig. "B."

"B"

JONES MANUFACTURING CO.

REQUISITION

STOREKEEPER:

Deliver to .....

No..... Charge to..... Date.....

The requisition will be made in just the same way whether the article is one which is kept in stock or not. If purchased for a special purpose, the stock man will simply transmit the request to the buyer keeping the original on file until such time as the goods come in and can be delivered to the party originating the order. This form is a rough draft, which will be altered by each user to suit individual needs, the point being to use a form which will require as little writing as may be. Spaces are provided for the date, for a number by which the order will be recognized, and for an indication by number or otherwise as to the shop order on which the material ordered is to be used, and to which it is to be charged. This same form will answer well enough in most cases for the store-room's order on the buying department as well.

The purchasing department must be protected by the store-room in the ordering of goods in such a way that there will always be given sufficient time for the ordering of fresh supplies, in order that there will at no time be a loss through shortage except in unforeseen cases—and these unforeseen cases must be, by foresight, reduced to a minimum. To ensure this there will be a "low mark" on each article, and when the stock nears that point a fresh supply will be ordered. Any unusual use of a given article will be noted by the stock-keeper and advance provision made for replacement. On the other hand, there must be great care exercised that no unnecessary supplies are ordered and put in stock, for this will result in tying up money in an unproductive manner. More than this: To order in excess of requirements may mean that there will, sooner or later, be a quantity of material which is of no use, for factory needs change, and material used to-day may be discarded to-morrow. A good stock-man can save his cost many times over each year through the saving in this direction alone, even though the shop be but a small one. No matter how small the factory, a stock-man who can be relied upon to do his duty in this direction, and who will also be able to show where every bit of material goes, is a prime necessity.

In a large factory the purchasing department will have an elaborate system for recording quotations and for indexing catalogues, but this need not be entered into here, for such plans are not essential to the ordinary shop of moderate size. There will be in all cases, however, a record of goods ordered, through which shipments may be kept track of and traced if necessary. The easiest plan is to make the order in duplicate, either on a regular order form or not, as may be deemed wise, the original being sent out as the order and the duplicate being kept for the house record. To make these orders in duplicate need not entail extra work on any hand if a carbon copy is made, and this is a very easy matter.

Let it be stated right here that the carbon copy is the very marrow of the secret of keeping our records without adding to the work of the factory or office, and thus without adding to the necessary expense. Any typewriter will make carbon copies, and where the machine is not used a pencil carbon copy will answer just as well.

The use of a regular printed order form is advisable for two or three reasons, the principal among which is that the use of a printed form enables terse instructions to be given as to shipping and billing of the goods without much chance of their being overlooked, and thus causing annoyance. Printed instructions in these cases have great weight. A good plan is for the purchasing department to wash its hands of the matter just as soon as the order has been actually sent out for the goods. The theory in this case is that it is the storekeeper's business to look out for the safe and prompt receipt of the items. In this case the duplicate order form, or rather the copy of the order, is sent to the store-room as soon as the order is sent out, and it is used as a guide for the checking up of the goods when they are actually received.

Receiving and Storing of Materials.

If the storekeeper is given a copy of the order as soon as it is issued he will know what receipts are to be expected, and will be able to provide for their care and handling at the proper time. This may seem a small matter, and in some cases it is unimportant, but in case of a concern using large quantities of heavy and bulky materials it often assumes great importance. How often have you seen important work neglected because one or more cars of goods have come in without advance provision for their handling and storage? Perhaps this never occurs in your establishment—let us hope not—but the writer has seen it happen in many a concern whose managers ought to have known better. It is far from uncommon to see car lots of stuff simply dumped from the car, only to be handled, and perhaps re-handled later on, because arrangements had not been made in advance. As before stated, a good stock-keeper will usually save his wages many times over in lessened expense and in saving of loss, but to enable him to do this he must be allowed to make the stock and its handling his first care, and if other duties are to be his they must be such that they can be dropped at any time if his stock needs his attention.

Receiving Goods.

Keep a receiving book. This may be a bound book if preferred, but the writer can see no excuse for a permanently bound book of any sort, for there is no function of a bound book which cannot be better fulfilled by a loose-leaf book, and with the latter many things are possible which are out of the question with the former. Let us digress here a moment to look at this point: We hear a great deal of talk about loose-leaf systems of records and accounts. Loose-leaf refers to the method of binding, and nothing more. One might just as well speak of a full Russia system or a half-calf system as a loose-leaf system in this sense, for all refer to the same point—the binding. A loose-leaf book permits the removal or transposition of leaves without the destruction of the book; the bound book does not. That is the whole story in a nutshell. It is sometimes urged that unauthorized persons might take sheets or leaves out of the loose-leaf book. So they might; but they might just as easily tear or cut a leaf out of the bound book if they chose. How would you know it if the latter were done? By the gap in the numbered pages, of course. Very true. But why not number your loose sheets also? The gap in the numbers would then appear just as it would in the bound book. Objections of this sort are sheer nonsense. The great secret of the usefulness of loose sheets is the ease with which records can be duplicated by means of the carbon sheet. This is practically impossible with the bound book, and if there were no other reason for the use of the former this would still be enough.

But to come back to our records. Let its form be what it may, a full record of all goods received must be kept, giving full data of name of firm, date of receipt, amount or quantity, and details as to price if desirable. In some lines of business it is not desirable that employees be possessed of details as to materials used. Where this is the case someone must be responsible for the checking in of goods bought, and after that the usual marks can be obliterated and the goods known by letter, number or other distinguishing mark. This plan is often followed in establishments using chemicals. The formula must be in the hands of the workman who actually handles the processes of manufacture, but that formula calls for pounds or gallons of ingredients bearing certain numbers, and no names are used in the factory at all. It is only in rare instances that this must be resorted to.

Perpetual Inventories.

This subject is one which has been the subject of much discussion among factory experts, and there is far from an unanimity of opinion regarding the desirability of the perpetual inventory. When a perpetual inventory is spoken of a record is meant which will at any time give a clear record as to the amount of any given material on hand. This does away with the necessity of a count or measure of stock on hand each time an inventory is demanded. If this were all, it is questionable whether the trouble would be worth while in many cases, but the fact is, this is the least of the advantages of the perpetual inventory. The great advantage, and the point which is the real reason for its use, is that the perpetual inventory absolutely checks loss, waste and theft. The perpetual inventory is really a stores ledger, in which is kept an account with each item of goods purchased and stored. This account is charged with all goods of a particular sort received and credited with all goods disbursed, full details as to the distribution of the goods being recorded. Even if the perpetual inventory is kept, there must be a verifying count at certain times, and the best time for this count is when the article in question approaches the low mark—the point where new goods of that sort are to be added to the stock. Thus the labor of the count or measuring is reduced to a minimum, and errors are less likely.

A card record will usually be found most desirable for this form of stores or stock records, and if the character of goods recorded permits it the card may be kept in a frame or rack with or near the goods themselves, but this will depend upon the individual circumstances.

It by no means follows, when we speak of a store-room, that all the stock of materials will be kept in one place. To do so is manifestly impossible, as in the case of a foundry where the pig iron and moulding-sand must be kept in a stockyard, or in the case of a wood-working factory, where the stock is piled in the yard or stored in sheds or dry kilns. The location of stock is an important factor in economical operation. All heavy or bulky stock should be stored where it will be easiest of access to the department using it, and the general store-room should be so located that it will be easy of access from all parts of the factory.

The usual custom of placing the store-room off in one corner of the plant causes a vast amount of waste time—more than the ordinary factory manager imagines unless he has studied the thing out. The time of workmen is too valuable to allow of its waste in chasing off to a remote corner of the plant for each item of stock wanted if he is to get it himself, and this is particularly true if the store-room is also the tool-room.

Shop or Work Records.

It will be conceded that there must be something in the way of an order each time an article or a quantity of a given article is manufactured, no matter what the products, unless the factory is what is called a "continuous process" factory. (Procedure for the latter class of factories will be separately considered.)

Granted that there should be an order issued, it would seem as easy to make that order a part of the permanent records as not. To make it a part of the records we need only to make it in duplicate by means of the carbon sheet. It is not even essential that the order be made on a typewriter. An indelible pencil will do, although the record will not be as compact or as readable. To make this duplicate need not add even the slightest amount to the work of issuing the order. Here we have the start of our system, and our purpose will be to keep down the extra work of a clerical nature, so that our complete system need not necessarily add one penny to the cost of conducting the plant; in other words, we want a complete statement of cost and detail without any added cost.

The sequence will be as follows:—

Shop order.
Material record on that order.
Supply record on that order.
Direct labor.
Collateral labor expense.
Overhead expense.

In the next—and last—paper a demonstration of the necessary forms and procedure for this purpose will be shown, including method of handling pay-roll and apportionment of overhead expense. The purpose will not be to give a ready-made system for one factory, but instead to show procedure for any factory, no matter what the output; and, as before stated, both continuous process and definite order shops will be included.

FIRE INSURANCE COMPANIES' ACCOUNTS.

Further Misleading Statements.

Last month we drew special attention in an article, entitled "Fire Insurance Companies' Accounts," to the misleading statements that are given to the public. In that article we dealt only with the class of companies which furnish detailed statements to the public; if the accounts of these companies are presented fully, the misleading statements are exposed to those who have experience enough to properly analyze them. It is true the majority of the policyholders are not in a position to draw their own conclusions, but the facts are given and the opportunity is open to all to take such advice as they consider necessary.

There is, however, another class of companies which carefully avoid the publication of detailed statements, but which advertise assets and liabilities, and the insuring public must accept the advertised facts, although they have no opportunity, until the Government Blue Book is issued, months after the close of the year, of forming any conclusion or of seeking advice of those who might impart it.

A typical instance of the latter class of companies has been forced upon us during the last month in the copious use of advertising space by one of the larger Canadian offices, which publishes the following figures:—

Assets	$3,570,821 20
Liabilities	1,170,011 08
Security to Policyholders	2,400,810 12
Income for year ending 31st December, 1906	3,859,179 63

A truly good showing, that entitles the company to the fullest confidence of the insuring public. Why not take the public into their confidence a few months earlier than the Blue Book will furnish the information, by advertising their account as the law compels them to render it to the Government?

Concise as is the published statement we have quoted above, there are some things about it that strike us as somewhat ambiguous and inexplicable. The account of this company rendered to the Dominion Government for 1906 gives their liabilities at the 31st of December, 1905, as $2,377,272.64, while the published statement from which we have already quoted advertises the total liabilities on 31st of December, 1906, as $1,170,011.08 only. The income of the company for the year ending 31st of December, 1905, was $3,580,827.96, against $3,859,179.63 for the year ending 31st of December, 1906, so that on the face of it, to anyone understanding the item, the reserve for unexpired risks could not well be less in 1906 than it was in 1905. Moreover, to the liability for unearned reserve must be added the estimate for losses unpaid—an unknown quantity—from the information before us. It is not unfair to assume that on an increased revenue the total liabilities should not be less than they were in the preceding year.

This company does a large business in the United States, and is compelled to render a statement to the Superintendent of Insurance of New York State in a form practically identical with that in use by the Dominion Government, and the figures furnished to the Department of that State are available some months earlier than those furnished to the Department at Ottawa. From the statement furnished by this company to New York we find the following figures of the two years in respect of the item of "Reserve for unexpired risks" on **United States business** only:—

Reserve at 31st December, 1905	$1,498,548
Reserve at 31st December, 1906	1,594,714

There seems to be some discrepancy here when the latter admitted liability is compared with the advertised total liabilities of $1,170,001. We cannot pretend, in the absence of all details, to correctly analyze the account of this company, but we have pointed out, from the materials at our hands, that the advertisements now running in the press are inaccurate and misleading.

Again we ask, Why not make the published statements on the basis used by the Government at Ottawa, or the Superintendent of New York State? This would at all events have the merit of consistency.

Canadian Pig Iron.

Discussing the British market for Canadian pig iron, Mr. John B. Jackson, Canadian Trade Representative in England, writes as follows:—

If the Canadian people would only make their pig iron more uniform, so as to approach the Swedish standard, they would get fifty per cent. more for it in this country than they are getting at present. The present grades of Canadian pig iron which are arriving at Liverpool are of exceptionally high order, and English manufacturers always give Canadian pig iron the preference over the common warrant iron produced at Middlesborough.

It is not practicable for Canadian exporters to transact direct business with the buyers at this side, as is done in many kinds of Canadian produce, but there are many opportunities for extending the trade with Liverpool and other ports. The system the local firms prefer to work upon, is to sample the metal in Liverpool and then analyze it in their own shops.

They are almost unanimous in stating that if Canadian exporters would only make a closer study of the requirements of the British market, and produce a more uniformly graded metal, their trade would increase tenfold, and the prices would soon approximate to the prices for Swedish iron. Prices are at present:—

	Per ton.
Middlesborough warrant	54s. to 60s.
Canadian	110s.
Swedish	130s. to 200s.

Booklets, etc.

The Canadian Fairbanks Co., Limited, have issued an illustrated catalogue describing their marine engines. To those interested in motor boats the booklet will be of great benefit. It gives a full discussion of the engines, with a detailed description of all the component parts. The catalogue is attractively designed.

The Saturday "Globe" of March 2nd contained interesting sketches of the plants of the Canada Foundry Co. and the Canadian General Electric Co. These mammoth industries have reached such a size that they cover the entire field of foundry and electric manufacturing. The work that they are now doing makes an interesting story. The illustrations of the machinery and equipment are ample evidence of the magnitude of their manufactures. The interesting news was just made public a few weeks ago that last year the Canada Foundry Co. built the first locomotive which had been built in Toronto for fifty years. They now have a department turning out locomotives with the utmost speed. The General Electric Co. has expanded in a similar way. New developments in electricity make its work of especial interest. Altogether the accounts were revelations of the progress of these two industries.

AMONG THE INDUSTRIES

The Canadian Oliver Typewriter Co. has opened a branch in Ottawa.

The Saskatoon Planing Mill, of Saskatoon, Sask., has been sold for $22,000.

Fire destroyed the factory of the Manning Wood Fibre Co. at Brooke, Ont., recently.

The Merner Manufacturing Co. will locate in Alliston, Ont. They will receive a bonus of $5,000.

The International Veneer and Lumber Co. has purchased a factory in the town of Renfrew, Ont.

The T. M. Ruston Planing Company, of Stratford, have recently built and equipped a new factory in that city.

The Sherlock-Manning Organ Company, London, have plans out for a two-storey brick addition to their organ factory.

Options have been taken on a number of zinc ore lands in Frontenac county by capitalists, who are understood to be contemplating the erection of a smelter at Kingston.

The Hutchison Bros. Co., Limited, of Victoria, B.C., have just occupied a new foundry and machine shop, and will proceed with the manufacture of engines and boats.

The firm of Dufton & Son, owners of the Stratford Woolen Mills, has been formed into a joint stock company, to be known as Duftons, Limited, with head office at Stratford.

The Down-draft Furnace Co., of Galt, have gone into the manufacture of stoves, in addition to their old lines. They will increase the capacity of their plant during the coming summer.

The Ingersoll Glove and Mitten Company suffered a loss by fire during the past month. The stock-room, containing much material, besides finished stock, was completely destroyed.

The site for the plant of the Silliker Car Company, in Halifax, has been purchased. Twenty acres have been secured, and it is expected that part of the plant will be ready for operation in six months.

The factory of the McGregor-Banwell Fence Co., of Walkerville, was completely destroyed by fire on March 16th. A heavy stock of fence, ready for spring shipment, was lost, together with much new machinery.

The Sydney Foundry and Machine Works anticipate adding to their present works a steel plant for the manufacture of all kinds of steel castings. The business may be turned over to a joint stock company.

The Hespeler Hoisting Machinery Company will be loaned $15,000 to establish their factory in Hespeler. It is rumored that the Parkin Elevator Co., of Hamilton, may join the former enterprise, and thus be moved from Hamilton.

A large brick plant is projected for Medicine Hat. The clay in the neighborhood of this city has been tested, and has been found to be admirably suited for brick making. The initial capacity of the proposed works will be 50,000 bricks a day.

The Medicine Hat Woollen Mills Company, of Lethbridge, soon to be called the Lethbridge Woollen Mills, is well under way, and it is expected that it will be in operation in a month. The severity of the winter held back building operations.

An extensive car-building plant is proposed for Medicine Hat. The people of the West are feeling that the immense railway extensions which are going on there should result in some permanent industries. Considerable Western money is available for such an undertaking.

Hamilton may get the Canadian branch of a large French steel works. Messrs. A. & W. Jacques, of Paris, France, have been looking into the possibilities for the manufacture of a special quality of steel for machinery. The promoters are asking for the admittance, free of duty, of the initial machinery.

The Toronto Plate Glass Importing Co., of Toronto, suffered a complete loss by fire on March 9th. The offices and factory, which were situated in a retail district of the city, were completely destroyed. The buildings burned like a huge furnace, entailing a loss of over $175,000. Insurance amounting to $145,000 was carried.

A company of capitalists are negotiating with the municipality of Fort William in connection wth the establishment of shipbuilding yards in that place. They undertake to raise one million dollars for the industry if the city will guarantee two per cent. interest for twenty years on a bond issue of a like amount. The company would employ 350 men.

The Dominion Bridge Co., Limited, Montreal, will take over the structural department of the Locomotive Machine Works at Longue Point. It is understood that the structural department has not been run at a profit, and the locomotive company will confine its attention to the building of engines. The deal represents an expenditure of about two million dollars.

Henry Birks & Sons, of Montreal, have taken over the entire plant and stock of the Gorham Company, of Canada. The Gorham Company is the Canadian branch of the Gorham Manufacturing Co., of Providence and New York, probably the largest silver manufacturing concern in the United States. There has been an interesting fight going on for years between the two companies. The recent deal marks the final victory of the Birks Company.

Two Bessemer furnaces are being installed in the plant of the Dominion Iron and Steel Co. at Sydney. The putting in of the plant was begun early last fall, and has steadily progressed up to the present stage, despite the rigors of the winter. The outside covering or building has been finished, and the steel frame work in which the furnaces are to be encased is also in position. The furnaces proper arrived Saturday night from Newcastle, and the work of setting them up is to be begun at once. In about four weeks the contract is expected to be finished, and the furnaces will be "blown in" immediately. With the satisfactory working of these furnaces a new era is looked for in the manufacture of steel at the Sydney plant. The present method of separating prosphorus and other superfluous elements from the molten metal is too slow, and does not meet the requirements of the many heavy contracts for steel rails, with the result that the management decided to install the Bessemer plant to hasten the output. The rail mill can handle a much larger quanity of steel than can be delivered to it by the present system, but it is expected that when the new plant is in working order steel will be furnished in sufficient quantities to keep the departments of finished product at the maximum output.

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the name of enquirers, apply by number to the Secretary, of Toronto.

248 **Agent.—A London, England,** commission house with connections in South Africa would like to hear from two good Canadian firms desiring representation in **South Africa.**

249 **Agent.**—Well-known West Indies Merchant with good connections and experience is open to travel for Canadian houses in the **West Indies.** References.

250 **Agent.**—Old established commission house in **Durban, South Africa,** would like to take on Canadian houses who desire representation in South Africa; agricultural machinery and allied industries particularly desired, but other line will be carried.

251 **Agent or European Representative.**—Well recommended traveller with twenty years experience in **Great Britain and the Continent** desires to travel or act as European representative for reliable Canadian houses. Speaks English, French, German, Portuguese and Spanish. References at this office.

252 **Agent, Commission.—German** commission agent reliable and with first-class connections, would like to hear from Canadian novelty and furniture houses, desiring to introduce their goods in Germany.

253 **Asbestos Powder.—A London** firm is open to entertain business in asbestos powder and short fibres, and would like to get into touch with Canadian producers.

254 **Apples.**—A prominent fruit grower and shipper in **Mexico City** would like to make connection in Canada with exporters of first-class apples.

255 **Bessemer Steel Rods.**—An **Ontario** firm is in the market for a quantity of 3-16 Bessemer steel rod, lacquer finish.

256 **Book Cases.**—A **Manchester Firm** wishes to obtain prices and catalogues from Canadian Manufacturers of book cases, cabinet, library and revolving.

257 **Boxes.**—A **Transvaal Chemical Company** desires to get into touch with Canadian manufacturers of boxes, for candle purposes. The requirements of this firm are from 35,000 to 50,000 per month.

258. **Business Relations Desired.**—An importing and exporting in general commission firm, established 1871, **Osaka, Japan,** is desirous of establishing business relations with parties in Canada wishing to do business in Japan; unquestionable references.

259 **Butter Tubs.**—A **Newfoundland** firm of wholesale provision merchants, established seventy years, is in the market to buy butter tubs to contain 50, 60, or 70 pounds.

260 **Calcium Carbide.**—A **North Shields** firm wishes to hear from a first-class Canadian firm open to ship calcium carbide.

261 **Canadian Peas and Flour.**—A **Christiania, Norway,** Commission house is open to buy Canadian Peas and flour from first-class exporters.

262 **Canadian Whiskey.**—A **London, England,** wholesale wine and spirit house ask quotations f.o.b. Canadian ports on Canadian whiskey.

263 **Casein.**—A **Manchester firm** will entertain the purchase of casein from Canadian exporters, if satisfactory price is made.

264 **Carriage Timber.**—A firm in **Natal** is desirous of being placed in communication with Canadian firms dealing in carriage timber for export.

265 **Cheese.**—A **Sheffield** produce firm with extensive connections are in a position to accept direct shipments of Canadian cheese (60 to 75 lbs.) on consignment with cash against bill of lading in fourteen days. Best commercial and bank references furnished.

266 **Cheese.**—A **Yorkshire** firm has asked to be placed in communication with exporters of Canadian cheese and other produce suitable for the wholesale provision trade.

267 **Chair Seats and Backs.**—A **Manchester firm** with connection throughout England, desire prices of chair seats and backs from Canadian manufacturers.

268 **Coal and Coke.**—An importing house in the **City of Mexico** wishes to make connection in Canada for the purchase of coal and coke.

269 **Cheese.**—A **Cape Town** firm desires to secure the agency of a reliable manufacturer of Canadian cheese, and has requested to be placed in communication with likely parties in Canada.

270 **Coffins.—A Birmingham Firm** wishes to buy large quantities of Canadian elm for coffins, or ready-made coffins.

271 **Colour Lakes.**—A firm of wall-paper manufacturers who are large users of colour lake ask to be referred to lake makers in Canada who might be in a position to export.

272 **Drugs and Chemicals.**—An established firm in **Mexico City** would like to form connection in Canada with manufacturers of drugs and chemicals for commercial and industrial use.

273 **Flour Mill Machinery.—A Shanghai** firm asks for quotations, catalogues, etc., from Canadian flour mill machinery manufacturers. Terms of payment 90 days sight against documents.

274 **Grain Products, Rubber Shoes, Etc.**—An **Iceland** merchant wishes to do business direct with Canadian exporters of motor oil, wheat, oatmeal, mair split peas, lumber, etc., Portland cement, rubber shoes and boots, iron, and steel. Promises a total volume of trade in all articles of $3,000 a year if prices are right.

275 **Hay.**—An old-established firm of forage merchants with large connections in the **West Riding of Yorkshire** are prepared to consider prices for direct shipments of hay. Preference given for clover mixed with timothy or ryegrass.

276 **Leather Grease.—A London, England,** firm of wholesalers and commission agents are in the market to buy from 100 to 200 tons of leather grease from Canadian exporters. Quotations asked on 20-ton lots.

277 **Lumber and Ties.**—An importing house in the **City of Mexico** wishes to make connection in Canada for the purchase of lumber and ties.

278 **Malleable Iron Pipe Fittings.**—An **Ontario** firm is in the market to purchase a quantity of these goods.

279 **Pine Doors.**—A **Manchester** firm asks for prices c.i.f. of pine door standard sizes, from Canadian manufacturers.

280 **Pine Flooring Boards.**—A **Lancashire** firm wishes to obtain prices of pine flooring boards tongued and grooved, from Canadian manufacturers.

281 **Planed Box Boards.**—A **Lancashire firm** asks for prices c.i.f. Manchester of planed box boards, sizes 26 in. x 7 in. x ¼ in., and 16 x 7 in. x ¼ in. from Canadian shippers.

282 **Raw Leaf Tobacco.**—The manager of a large tobacco factory will be glad to get samples and prices of Canadian raw leaf tobacco.

283 **Rice Flour.**—A **Glasgow, Scotland,** flour importing house wants to do business direct with Canadian millers handling rice flour.

284 **Sanitary Materials.**—A plumbing concern in the **City of Mexico** wishes to make connection with Canadian firms exporting sanitary materials of all kinds.

285 **Seamless Steel Forgings.**—An **Ontario** firm is in the market to purchase a quantity of seamless steel forgings for immediate delivery.

286 **Shoemakers Leather, Nails, Hemp, Etc.**—A **Nevis, B.W. I.,** firm of general merchants are open to purchase $50 lots of shoemakers' leather, (outsole, insole, calf-skin, Basil) hemp, harness leather, etc., bar iron, nails, and spruce shingles from Canadian exporters.

287 **Smoked Fish, Provisions, Etc.**—A **Dominico, West Indies,** house desires to procure small monthly shipments from Canadian houses of smoked and pickled herrings, flour, pork, lard, ale, stout, rye whiskey, etc.

YOUR BUSINESS FUTURE may depend on the VALIDITY of your FIRE INSURANCE before to-morrow. HAVE YOU given this the ATTENTION that PRUDENCE DEMANDS? WE remove the LABOR and WORRY from YOUR OFFICE and it COSTS YOU NOTHING. We will be glad to tell you HOW and WHY.

IRISH & MAULSON

INSURANCE BROKERS

Traders Bank Bldg., Toronto

We Pay Telephone and Telegraph Messages

THE NEWS

(TORONTO)

To Canadian Manufacturers

To those who are interested in advertising in general, and particularly to those who wish to have a correct estimate of the value of the advertising columns of **The News,** the accompanying statement will be of interest.

Increase in the past five months' advertising over same period last year:

1905	1906	Increase
Oct. ....323,395 Lines	382,864 Lines	59,469
Nov.....357,703 "	436,113 "	78,410
Dec.....390,284 "	454,167 "	63,883
1906	1907	
Jan. ....288,502 "	366,592 "	78,090
Feb. ....284,700 "	375,200 "	90,500
1,644,584 "	2,014,936 "	370,352

An Increase of 370,352 Lines, or 1,234 Columns, or 177 Pages, almost 25 per cent.

THIS RECORD SHOWS

That OLD ADVERTISERS are satisfied with results and are USING LARGER SPACE.

That it PAYS TO ADVERTISE in **The News.**

That in its sworn circulation of OVER 40,000 there is no waste. THEY ARE ALL BUYERS.

That with the FLAT RATE of 4 cents per line no heavy contract requires to be made. Use just enough space to SELL YOUR GOODS, NO LESS, NO MORE. No useless balance of contract to be used up, and only one rate to pay.

That **The News** HOLDS A COMMANDING POSITION amongst the Toronto daily papers.

That if your business demands newspaper exploitation **The News** is the STRONGEST and at the same time MOST REASONABLE medium.

Are you advertising in the daily papers?

Are you using **The News?**

If not, figure out how much you are LOSING IN YOUR REVENUE by not so doing and how little it would cost to ACTUALLY FIND OUT how advertising in **The News** would BENEFIT YOUR BUSINESS. When you decide send on your copy—The results will come.

The News, Toronto

EVERY MANUFACTURER USING BRASSES

SHOULD HAVE A

GENUINE TRADE PENBERTHY MARK

Penberthy Catalogue

Do You Make Boilers? Then you will use Injectors, Water Gauge Mountings, Gauge Cocks, etc.

Do You Make Steam Engines? Then you will use high-grade Oil Cups and Grease Cups, etc.

Do You Make Gas Engines? Then you will use Cylinder Lubricators, Priming Cups, Grease Cups, etc.

Do You Make Automobiles? Then you will want high-grade Brasses for the Engines.

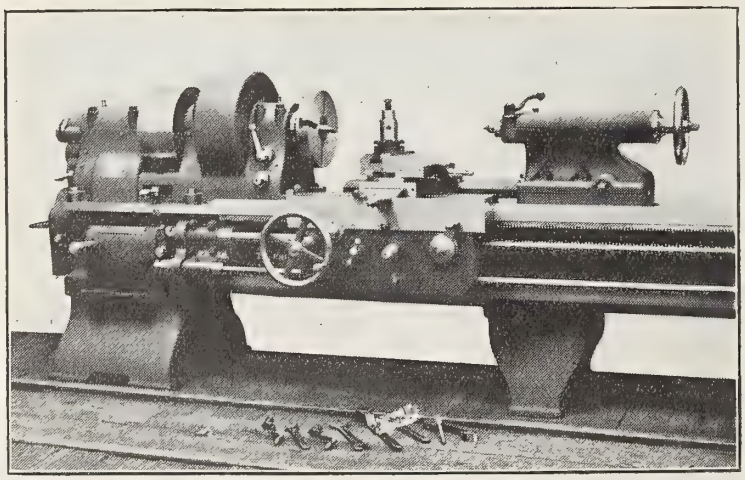
Do You Make Special Machinery in Which Brass goes into the Manufacture?

Remember, please, we do not make cheap or competition goods at all.
If you're a sticker for quality, you'll say **"Penberthy."**

DON'T FORGET TO SEND FOR A CATALOGUE

PENBERTHY INJECTOR CO., Limited, WINDSOR, ONT.

MACHINE TOOLS



BERTRAM 24 IN. HIGH SPEED LATHE

High Grade Machine Tools

of all kinds, for all purposes and for prompt delivery.

WE ARE SELLING AGENTS FOR:

NILES-BEMENT-POND - - JOHN BERTRAM & SONS CO., Ltd, - - PRATT & WHITNEY
BROWN & SHARPE - E. W. BLISS CO. - BAKER BROS. - R. A. KELLY CO. - J. J. McCABE
BIGNALL & KEELER CO. - - MERRELL MANUFACTURING CO. - - SENECA FALLS MFG. CO.
WILMARTH & MORMAN - - NIAGARA MACHINE & TOOL CO.

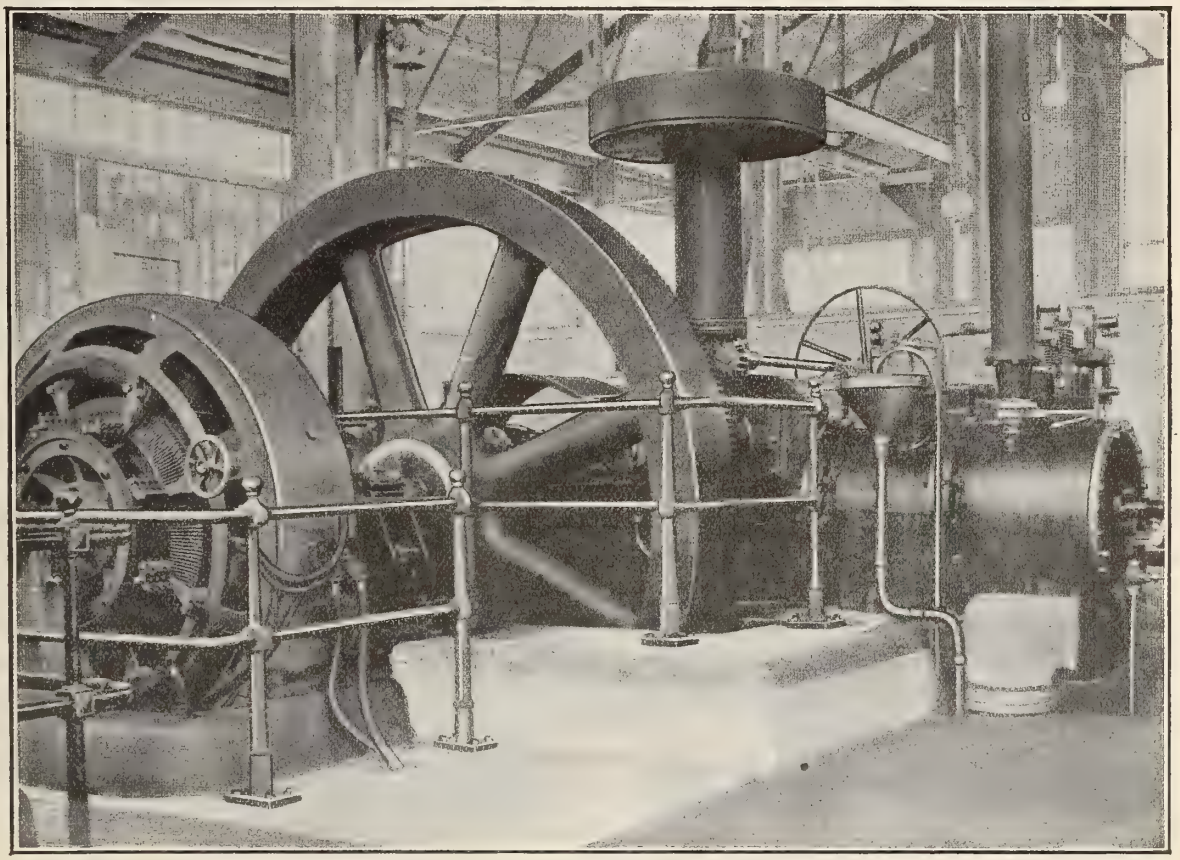
THE CANADIAN FAIRBANKS COMPANY, Limited

MONTREAL - TORONTO - WINNIPEG - VANCOUVER

"PREMIER" GAS ENGINES

FOR USE WITH

Producer Gas, Suction Gas, Blast Furnace Gas, Town Gas, Oil Gas, Coke Oven Gas.



100 HORSE-POWER "PREMIER" GAS ENGINE

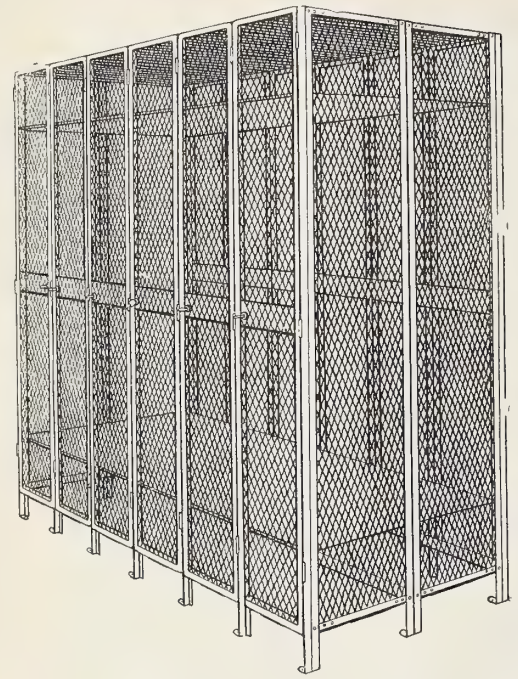
Simple, Reliable, Quiet, Steady, Economical. Small Repairs. Used with C. G. E. Electric Generators and Motors, form an ideal plant.

CANADA FOUNDRY COMPANY
LIMITED

Head Office and Works: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland.

Every up-to-date factory counts a proper LOCKER SYSTEM a necessity, it saves money.

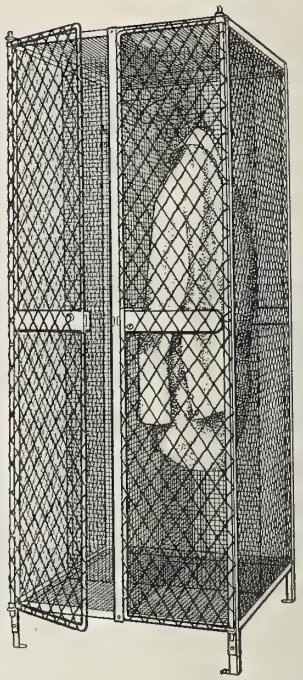


WRITE US ABOUT YOUR REQUIREMENTS.

The
Geo. B. Meadows

TORONTO WIRE, IRON AND BRASS WORKS COMPANY, LIMITED,

67 Wellington Place,
Toronto
Canada



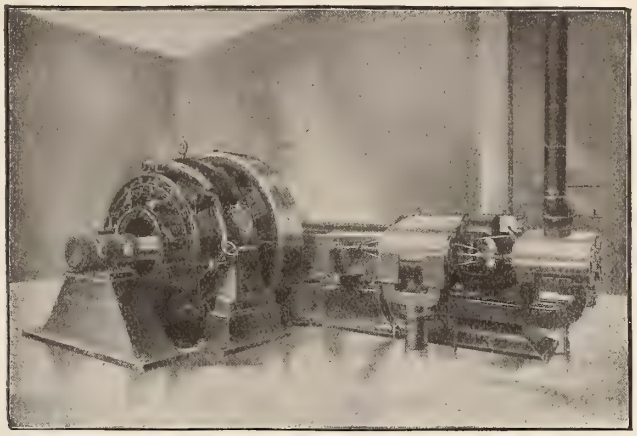
SMART BAG CO.
LIMITED

BAGS in JUTE, BURLAP and COTTON
BAG PRINTING a specialty
JUTE CLOTH, HESSIANS, BURLAPS and PADDINGS
TWINES, ROPE, etc.

FACTORIES AND OFFICES:
MONTREAL—TORONTO—WINNIPEG
HEAD OFFICE: **MONTREAL**

W. A. JAMES,
AGENT,
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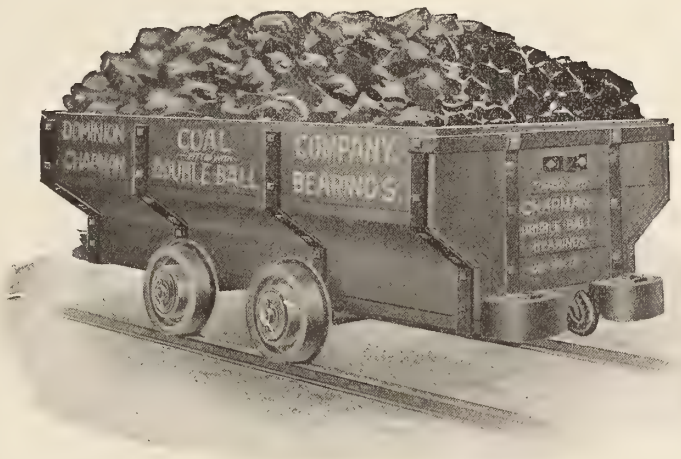
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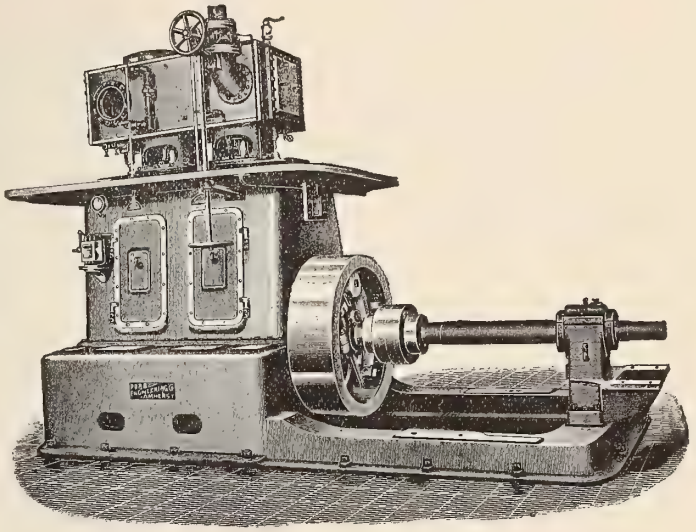
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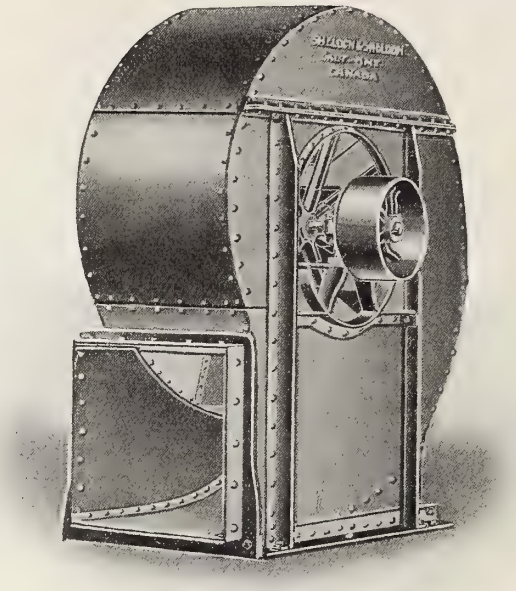
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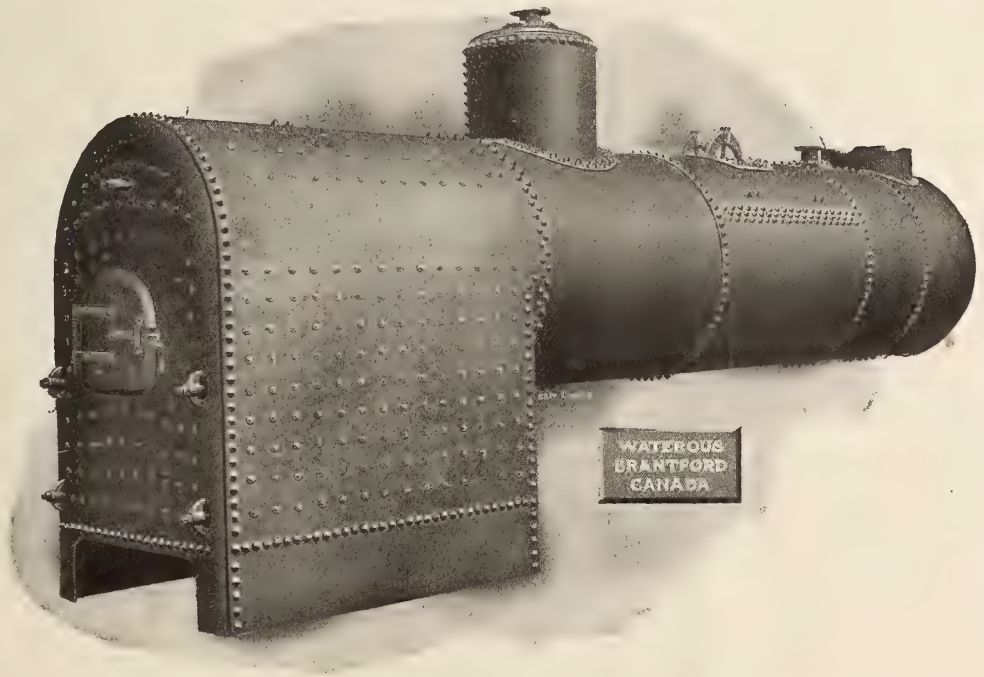
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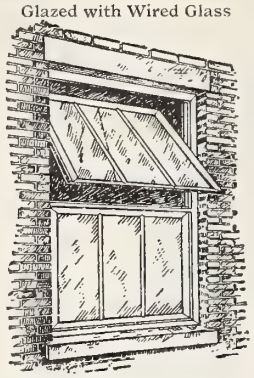
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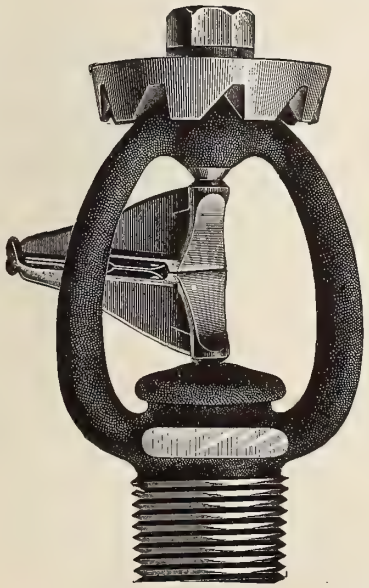
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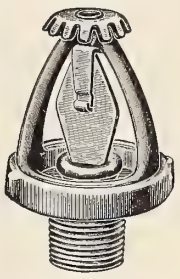
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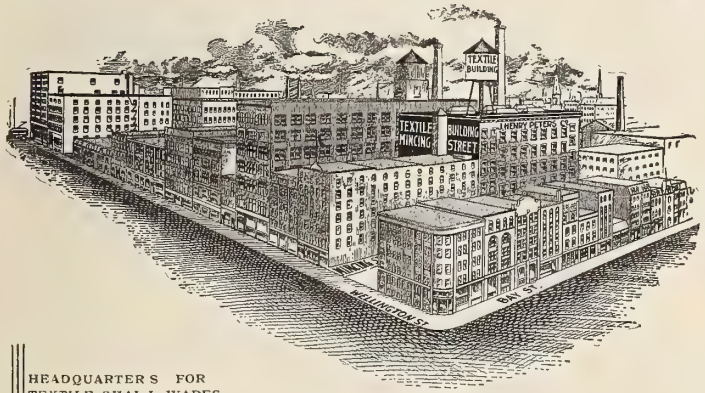
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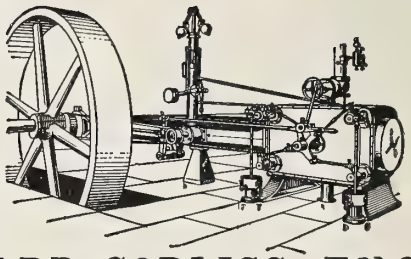
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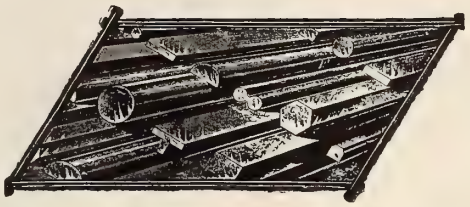
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EXECUTIVE COUNCIL

MARCH MEETING.

The regular monthly meeting of the Executive Council was held in the Council Chamber of the Board of Trade, Toronto, March 21st, 1907.

The President, Mr. H. Cockshutt, occupied the chair. Other members present were: Messrs. G. Frank Beer, Toronto; P. H. Burton, Toronto; John Dick, Toronto; L. V. Dusseau, Toronto; J. F. Ellis, Toronto; P. W. Ellis, Toronto; Thos. Findley, Toronto; E. J. Freyseng, Toronto; P. Hamill, Montreal; S. Harris, Toronto; J. I. A. Hunt, London; J. S. Knechtel, Hanover; J. S. McKinnon, Toronto; R. McLaughlin, Oshawa; J. B. MacLean, Toronto; J. P. Murray, Toronto; Carl Riordon, Merritton; J. D. Rolland, Montreal; J. M. Sinclair, Toronto; W. B. Tindall, Toronto; R. L. Torrance, Guelph; Dan. Wilson, Collingwood.

The minutes of the meeting held in February, as published in "Industrial Canada," were taken as read.

Communications were received as follows:

(a) From members of the Executive Council regretting their inability to be present—Messrs. J. T. Sheridan, Toronto; C. C. Ballantyne, Montreal; Robt. Munro, Montreal; Wm. Smaill, Montreal; D. J. Fraser, St. Johns; T. F. Matthews, Peterboro; S. W. Ewing, Montreal; W. H. Rowley, Hull; Louis Simpson, Valleyfield; Col. Burland, Montreal; Geo. E. Amyot, Quebec; R. J. Younge, Montreal; Alex. Saunders, Goderich; J. S. N. Dougall, Montreal; Wm. Robins, Walkerville; Geo. Booth, Toronto.

(b) From the Secretary of the Lake Mohonk Conference, inviting the Association to be represented at their annual meeting to be held on May 22, 23, 24, next. This communication was referred to the Reception and Membership Committee.

Reports of officers and committees were then presented as follows:

The President announced that he expected to visit the Eastern Branches of the Association in company with the Secretary during the week beginning April 7th, and hoped to be able to report at the next meeting of the Council that good results had been accomplished.

The report of the Treasurer, Mr. Geo. Booth, who was unable to be present, was read by the Secretary. It showed that the Association had a cash balance to its credit at the end of the seventh month of $18,985.53. This report was received with satisfaction.

FINANCE.

The report of the Finance Committee was presented by the Chairman, Mr. W. B. Tindall. It recommended for payment the customary accounts for the month amounting in all to $2,012.67.

With reference to a request which it had received from the Toronto Branch, asking for an appropriation of $50 to purchase prizes for the Toronto Technical High School, it stated that the Committee did not feel that it had authority to grant same and would refer the matter to the Council.

It recommended for re-engagement the Manager of the Insurance Department, also the Editor of "Industrial Canada," and the Advertising Manager.

Moved by Mr. Rolland, seconded by Mr. McLaughlin that an appropriation of $50 be voted to the Toronto Branch for the purpose mentioned. Carried.

The adoption of the report, moved by Mr. Tindall, seconded by Mr. Beer, was then put and carried.

INDUSTRIAL CANADA.

In the absence of the Chairman, Mr. Jas. M. Sinclair read the report of the Industrial Canada Committee, the principal item of which was the recommendation regarding the re-engagement of Mr. Anderson and Mr. Megan, which has already been referred to in the report of the Finance Committee.

The report also stated that it was the intention of the Committee to develop "Industrial Canada" more along the lines of an official organ by inserting a few pages of editorial notes each issue, in which the news features of the Executive Council reports would be written up in a light, readable style.

The adoption of the report, moved by Mr. Sinclair, seconded by Mr. Torrance, was carried.

COMMERCIAL INTELLIGENCE.

Mr. Jas. P. Murray presented the report of the Commercial Intelligence Committee, which dealt with the following subjects:

Metric System.

In view of the likelihood of the question of Weights and Measures being discussed at the approaching Conference of Colonial Premiers, the Committee recommended that the Association again place itself on record as opposed to compulsory legislation until after the matter had been thoroughly investigated by a Royal Commission. A resolution was recommended in these words:

WHEREAS, The Canadian Manufacturers' Association has for some years considered the question of Weights and Measures, the result being that the Association introduced a resolution at the Sixth Congress of the Chambers of Commerce of the Empire, in London, asking for a Royal Commission to enquire into the most suitable system for adoption within the Empire,

AND WHEREAS, The Decimal Association of London is advocating the Metric System and its compulsory adoption,

AND WHEREAS, The British Weights and Measures Association is endeavoring to introduce the "inch" as a unit;

BE IT RESOLVED, That the Canadian Manufacturers' Association reaffirm its resolution asking for the appointment of a Royal Commission to investigate the question of Weights and Measures,

AND BE IT FURTHER RESOLVED, That the Association place itself on record as being opposed to compulsory legislation on the subject until the Commission asked for has brought in its report;

AND BE IT FURTHER RESOLVED, That in the opinion of the Association no radical change in the system of Weights and Measures should be adopted except after international conference between the English-speaking nations.

Stamped Envelopes.

A conference had been held with interested manufacturers of envelopes in the City of Toronto, when a number of reasons were brought forward to show why the Government should not be urged to make any extension of the present system. The Committee decided to make no recommendations in the matter until after the views of the manufacturing stationers in Montreal had been ascertained.

New Zealand Exhibition.

The Committee recommended that a formal letter of thanks be sent to Mr. McIntyre, Director of Exhibits of the Christchurch International Exhibition in recognition of his services in behalf of Canadian exhibitors.

Australian Preference.

It was reported that negotiations in the above matter would be resumed at the Conference of Colonial Premiers, and the Committee announced its intention of waiting upon the Prime Minister in the near future to lay the views of the Association clearly and forcibly before him.

The report also referred to investigations which the Committee were carrying on regarding the Brussels Sugar Bounty Convention, an extension of the Franco-Canadian Treaty and the standardizing of sizes for catalogues, all of which would be reported on at a later meeting.

Th adoption of the report, moved by Mr. Murray, seconded by Mr. Freyseng, was carried.

PARLIAMENTARY.

In the absence of the Chaiman, Mr. A. S. Rogers, the Secretary read the report of the Parliamentary Committee as follows:

Your Parliamentary Committee begs to report the holding of its regular monthly meeting on March 6th, when the following matters were dealt with:

Ontario Companies Act.

In addition to the recommendations already reported to the Council in the above matter, the Committee was requested to consider the advisability of amending the following sections:

(a) Section 81, which states that no payments for salaries shall be made to the President or any director of a Company unless such payment be authorized by by-law confirmed by a vote of two-thirds in value of the shareholders present at a general meeting. The Committee would recommend that the Government be asked to legalize the payment of salaries to the President and Directors when authorized by by-law confirmed by a majority vote in value of the shareholders.

(b) Section 83, which prohibits a Company from using any of its funds in the purchase of shares or other securities of any other corporation until the directors have been authorized by by-law to do so. Your Committee would recommend that the words "other securities" be struck out so as to permit bonds of unquestioned value to be purchased.

(c) Section 113, which provides that a Judge of the High Court may appoint an inspector to investigate the affairs of any company upon application by not less than one-fifth in value of the shareholders of that Company. In this connection your Committee feel that it is desirable in the interests of the minority shareholders to make no change.

Child Labor.

Following the introduction of Mr. Preston's resolution to raise the age limit of minors working in factories from fourteen to sixteen years, and to reduce the hours of labor for such minors to a maximum of eight per day, a committee was appointed by the Ontario Legislature to investigate and report on the conditions surrounding the employment of child labor in Ontario factories. A number of members, who it was thought would be most interested, were consulted, but the replies received indicated that the matter was of such little interest to the general membership that your Committee did not feel justified in taking any action. It has recently been pointed out that should legislation be enacted along the line of Mr. Preston's resolution, it might prove the first step towards the adoption of an eight-hour day for all classes of workmen. The Committee would be glad to have an expression of opinion from the Council, as to the advisability of circularizing the Ontario members of the Association at once, pointing out the possible effect of Mr. Preston's resolution, and inviting them to make known to the Parliamentary Committee such objections as they may wish to bring forward.

Stationary Engineers Bill.

Printed copies of the Government's Bill respecting Stationary Engineers, have recently come to hand. While the Bill on the whole is regarded as satisfactory, a letter has been forwarded to Mr. McNaught suggesting that the Bill would more nearly meet the views of the manufacturers if it were amended in the following respects:

(a) To free from the application of the Act all steam heating plants operating at a pressure of 20 pounds or under.

(b) To make certificates granted under this Act good for life or during good conduct.

(c) To modify the penalty provided in the case of engineers who fail to register each year before the 1st of February to something less harsh than the cancellation of certificates, which the Act provides for as it stands at present.

(d) To make it compulsory for the Board of Examiners to report each year the names of those who have been refused certificates or whose certificates have been cancelled.

(e) To make it unlawful for any engineer licensed under the Act to leave his employment under conditions which would prove dangerous to life and property.

Bill to Prevent Strikes in Public Utilities.

After a very careful discussion of the general principles involved in the Honorable Mr. Lemieux's Bill, it is the opinion of your Committee that the Association should not place itself on record in any way in respect to this measure.

Dominion Elections Act.

A bill was introduced into the House of Commons early in the session by Mr. Claude Macdonnell amending the Dominion Elections Act in such a way as to provide (a) for compulsory voting under heavy penalties, (b) for leave of absence for all employees on election day for a period not exceeding two hours, for which absence there must be no diminution in pay. The Committee is informed that the Bill will not be pressed at this session, though it is likely to come up again next fall in some slightly amended form as a Government measure.

Moved by Mr. Harris, seconded by Col. MacLean, that the Committee be authorized to circularize the Ontario members for the purpose indicated. Carried.

The adoption of the report, moved by Mr. Beer, seconded by Mr. Harris, was then carried.

RAILWAY AND TRANSPORTATION.

In the absence of the Chairman, Mr. J. H. Housser, the report of the Railway and Transportation Committee was presented by the Manager of the Department.

It read in part as follows:

Readjustment of Rates.

The statements which were referred to the last meeting have been gone over carefully by the Department, and two meetings of the sub-committee were held, at the latter of which was present the Chief Traffic Officer of the Railway Commission. It was pointed out that in view of these statements, which apparently involved a large loss of revenue on the part of the railways, unless some tentative arrangement could be come to, it might become necessary for the Board of Railway Commissioners to call for an audit of the books and accounts of the railways in order to ascertain whether or not the claim advanced by them was correct.

With the object of avoiding the delay which would ensue therefrom, it was moved by Mr. Dunn, seconded by Mr. Champ, that we petition the Commission to instruct the railways to put in effect as soon as they can be issued, the date to be set by the Commission, tariffs giving effect to the rates contained in the railway's proposal of November 8, 1906, with the amendment that there is to be no increase in the first-class rate from the United States frontier points, such as Port Huron, Detroit and Buffalo, and that commodity tariffs be issued for the continuance of commodity rates; or new commodity tariffs be issued protecting the present class rates on commodities used as raw materials by manufacturers in Eastern Canada; and that the acceptance of this experimental arrangement shall not deprive this Association or any of its members of the right at any time to appeal to the Board against these new rates; nor prejudice any complaint of the Association or its members whatever against the discrimination in the east and west-bound rates which now exist; nor act as a precedent in any of the cases now before the Board or to be presented.

Bills of Lading.

The draft of the general terms and conditions of carriage of the new bill of lading as submitted by the railways to the Railway Commission was discussed and instructions were issued to furnish each member of the Committee with a copy, to which objections are to be made and discussed at the next regular meeting.

In submitting the draft the Board of Commissioners requests that any representations in respect to same be made on or before the first day of May next.

Express Rates.

In view of the fact that the express companies have now come under control of the Railway Commission and that all tariffs have been filed for approval by the Board before May 1, 1907, the Committee recommend to the Executive Council the advisability of instructing the Manager to issue a circular to all members calling attention to the same and requesting them to file any complaints or grievances which they may have, in order that they may be brought to the attention of the Board of Commisioners.

Interswitching Toronto.

Certain members of the Association have called attention to the fact that there has been a change in the interswitching arrangements which have existed for some years past in Toronto, and the Department has the matter in hand. Instructions were given to obtain some further information and refer the same to the Toronto Branch of the Association as it was a matter that was of particular interest to the Toronto members generally.

In moving the adoption of the report, Mr. J. F. Ellis took occasion to congratulate Mr. Walsh on the progress which had been made in connection with the readjustment of rates. Mr. McLaughlin seconded Mr. Ellis' motion, which was carried.

INSURANCE COMMITTEE.

The report of the Insurance Committee was read by the Manager of the Department as follows:

At the inauguration of the Insurance Department it became necessary to devise ways and means for the creation of an immediate revenue to defray the expenses of the Department; and while a portion of the expenses have thus been provided for it has not been possible to meet them in full. Since the inauguration of the Department the revenue has been derived from three distinct sources, viz.:

1. Placing business and receiving commissions thereupon.
2. Fees for examination of policies.
3. Fees for the adjustment of Fire losses.

The Committee has, upon full consideration of the facts, reached the following conclusions which are expressed without going into unnecessary details:

1. That the revenue from placing business has been derived under circumstances of great disadvantage, and if it is to be developed, provision will have to be made for the work which is now conducted at much too great a cost. Further, that without additional competent assistance the placing of business is attended with responsibilities that the enforced absence of the Manager may be and indeed has been attended by unfortunate complications.
2. That the Insurance Department could do much more effective work for the members generally, if the creation of a revenue by means of commission was not necessary.
3. That the increasing proportion of revenue derived from "Fees" during the past year must be regarded as affording reasonably good grounds for believing that a relief from existing detail duties would produce correspondingly increased remuneration from other sources that will be indicated later.
4. That the time occupied in obtaining and placing business could and should be turned to the advantage of more members in the direction of general expert advice, inspections and similar work.
5. That the experience of the past two years has unmistakably proved the necessity of a more general and systematic use of the Department by members in the examination of policies before the occurrence of a fire.
6. That the work of the Department should be extended and developed along the following lines:
   (a) Examination of policies.
   (b) General expert advice and assistance.
   (c) The protection of risks by modern Fire Fighting appliances, including Automatic Sprinkler installations.
   (d) Adjustment of Fire losses.
   (e) Development of Mutual Insurance plans.

They believe the interest of the majority of the members would be best served by a persistent educational campaign along these lines, and they recommend that the policy of the department should be shaped accordingly..

The Committee would point out that if the change of policy they recommend is adopted, it will take some time for the Department to adjust itself to the altered circumstances and to bring the revenue to a figure approximating the expenses. They, however, believe it will not be long before the revenue under the new policy will be larger than under the old, while it will undoubtedly afford greater opportunities of service to a large number of the members of the Association.

The Committee attach a schedule of charges which they recommend should be made for services to be rendered under the various heads and suggest that a definite form of contract should be formulated in which these should be clearly set forth.

Scale of Charges for the Services Enumerated Below.

When amount of insurance is,—

Under			$ 10,000	Charge	$10
Between	$ 10,000	and	25,000	Charge	15
Between	25,000	and	50,000	Charge	20
Between	50,000	and	75,000	Charge	25
Between	75,000	and	125,000	Charge	30
Between	125,000	and	200,000	Charge	40
Between	200,000	and	400,000	Charge	50
Over			400,000	Chg 1-80 of	1%

For the above charges, the Department undertakes the following services:

1. Examination and report on Fire Insurance policies as to adequacy of the wording and the existence of burdensome or unreasonable conditions.
2. Preparation of new and approved forms of wording wherever necessary.
3. An opinion on the stability and reliability of the Insurers.
4. Advice as to the best means to adopt to secure lower rates.

Note 1. These charges do not provide for personal inspection. A full inspection will be made on request, and the member will pay therefor all expenses incurred and a per diem charge of $15.

Note 2. No contract will be entered into for a shorter period than 3 years, except under special circumstances and on the payment of special charges.

Note 3. The Department will arrange special terms for risks equipped with automatic sprinklers.

Scale of Charges for Loss Adjustment

When the amount of the loss to be paid by insurers is,—

					Minimum.
Under			$ 5,000	2%	$ 50.00
Between	$ 5,000	and	10,000	1½%	100.00
Between	10,000	and	20,000	1%	150.00
Between	20,000	and	30,000	¾%	200.00
Between	30,000	and	40,000	⅝%	225.00
Between	40,000	and	100,000	½%	250.00
Over			100,000	⅜%	300.00

Note 1. These charges are exclusive of expenses.

Note 2. 50% to be added to above charges when the adjustment is undertaken for members who have not previously retained the Insurance Department for general advice as above set forth.

Scale of Charges—Arranging for Fire Fighting Appliances.

The charge for arranging for the installation of fire fighting appliances, including automatic sprinkler equipments will be based upon the saving effected on the first year's insurance premiums by reason thereof, viz.

Automatic sprinkler equipment 10%
All other apparatus 25% } exclusive of expense.

In moving the adoption of this report, Mr. Tindall congratulated Mr. Heaton on the splendid services he had rendered the Association and also congratulated the Association on its ability to retain Mr. Heaton in its service.

Mr. Burton seconded Mr. Tindall's motion, which was carried.

RECEPTION AND MEMBERSHIP.

The report of the Reception and Membership Committee, read by Mr. L. V. Dusseau, recommended that the Convention for 1907 be held in the City of Toronto, at a date to be subsequently decided upon.

Fourteen applications were recommended for acceptance, the names of which appear in another column.

The adoption of the report, moved by Mr. Dusseau, seconded by Mr. Rolland, was carried.

BRITISH OFFICE.

On behalf of the British Office Committee the Secretary reported that up to date forty-six applications had been received, calling for 738 work people. He submitted a statement showing the distribution of this help by Provinces, by trades, and by wages to be earned. Thus far fourteen hands had arrived and were reported by the employers to be giving good satisfaction.

Mr. P. W. Ellis moved and Mr. McLaughlin seconded the adoption of the report, which was carried.

BRANCHES.

The Honorable J. D. Rolland read the report of the Montreal Branch and Mr. E. J. Freyseng the report of the Toronto Branch, both of which will be found elsewhere.

Mr. Freyseng thanked the Association for deciding to hold the 1907 Convention in Toronto, and assured the meeting that local members would do everything in their power to make the Convention a success.

The meeting then adjourned.

MONTREAL BRANCH.

The regular monthly meeting of the Montreal Executive Committee was held on March 14th, when a large number of matters were taken up. Representatives from the Montreal Technical Institute waited upon the Committee in regard to the holding of an open evening at the new Technical High School on Sherbrooke Street, when the manufacturers of the city would be invited to be present, and an opportunity given to consider whether evening classes for manual training could not be given. The invitation was cordially accepted, and an open evening at the Technical High School will be arranged shortly.

Six representatives of the Association took part in the large delegation which went to Quebec by special train on February 26th to urge upon the Government that a bill be put through the Legislature compelling all municipalities to submit to popular vote, or to have ratified by the Lieutenant-Governor-in-Council any proposal to grant monopolies in public utilities for a period of more than ten years. This suggestion was adopted by the Government, and a bill passed along those lines

It was decided to hold the customary spring entertainment, and a special committee was appointed to take the matter in hand.

TORONTO BRANCH.

Power Question.

Since the last meeting of the Executive Council the Toronto Branch has been very active in the electric power question. On Tuesday, March 12th, a special meeting of the Executive Committee was called to consider the attitude of the Branch to the application of the Toronto Electric Light Company for increased capital. Resolutions were carried protesting against the granting of the Electric Light Company's application by the Government until the Expropriation Bill, introduced by the city, has been disposed of by the Legislature. Copies of this resolution were forwarded to the Premier, Hon. W. J. Hanna, Mayor Coatsworth, and the members of the City Council. It is satisfactory to note that subsequent action by the Government and City Council in this question has followed the lines of the Branch's resolution.

Two conferences have been held with Commissioner of Industries Thompson, with whom the Branch is co-operating in the taking of a power census of Toronto manufacturers. Representative manufacturers have been present at these conferences, and a great many difficulties which the Commissioner would meet with in making a canvass have been threshed out. Following a suggestion made at the last conference, the Commissioner will endeavor to procure the information in the possession of Messrs. Ross and Holgate, who collected complete and accurate power statistics in Toronto over a year ago, and thus much time will be saved. There seems no doubt now that the canvass will be complete by the time the Hydro-Electric Commission can deliver Niagara power in Toronto, and the members will, therefore, be able to reap all the benefits of cheap electric power.

Technical Education.

The Technical Education Committee reported having made a visit of inspection to the Technical High School. Considerable discussion arose over the nature of the courses which should be given in the new Technical School the Board of Education is about to build, and there was some difference of opinion expressed as to whether the school should aim at giving instruction in special trades or giving a broad, technical training, which would serve as a foundation for any special trade. It was decided to ask the Technical Education Committee to make recommendations regarding the courses to be given in the new school, and the prizes which the Association will give for competition among the pupils, and submit them at the next meeting of the Branch.

Child Labor.

The attention of the Branch was directed to the fact that a special committee of the Legislature is investigating the conditions of child labor in Ontario, and it was stated that there was an agitation on foot to have the regulations made more stringent. This question was discussed at length, and it was felt that the Association should endeavor to have the regulations left as they are at present. The matter was referred to the Parliamentary Committee, whose report thereon will be seen elsewhere.

The Workingmen's Homes Committee reported that the dinner in connection with their plans, held last month, was one of the best attended in the annuals of the Branch, and that favorable progress was being made in the scheme.

The Dinner Committee announced a luncheon to be held early in April at which Mr S. J. Williams, of Berlin, will speak on "Welfare Work in Canadian Factories." The Smoke By-law Committee is considering the city's amendment to the smoke-prevention clause in the Municipal Act, and will likely make recommendations thereto, tending to make the Act less onerous to manufacturers.

NEW MEMBERS.

CALGARY, ALTA.
- **The Alberta Portland Cement Co., Limited.**—Cement.

ELORA, ONT.
- **T. E. Bissell.**—Harrows and Land Rollers.

MONTREAL, QUE.
- **Miller Bros. & Toms.**—Machinists.
- **C. Paquin & Fils.**—Printers.
- **St. Lawrence Supply Co., Ltd.**—Railway Specialties.
- **The St. Lawrence Wagon Co., Ltd.**—Heavy Vehicles.

QUEBEC, QUE.
- **Samuel Tremblay.**—Leather Board.

TORONTO.
- **The Capstan Mfg. Co.**—Grocers' Sundries, Jams.
- **E. B. Collett.**—Paper Boxes.
- **The Gutta Percha & Rubber Mfg. Co.**—(Alex. Macpherson, second member.)
- **Chas. W. Keith.**—Printer.
- **The Ontario Neckwear Co., Limited.**—Men's Neckwear.
- **Smith, Baggs & Heaven.**—Leather Goods.
- **Terra Cotta Pressed Brick Co., Ltd.**—Pressed Brick.

Incandescent Lamp Filament.

Economic methods of lighting are of such importance that improvements in incandescent lamps are always eagerly welcomed. A new filament, called the helion filament, has just been produced, which gives promise of good results.

The helion filament is composed largely of silicon, which is reduced and deposited, together with the other materials, under very exact conditions. The base which is being used at present is a special carbon filament, on which the necessary deposit is made. The filament is mounted within a globe, which is then pumped out, much the same as with the ordinary carbon lamp. The filament, while not metallic in the proper sense, shows a metallic characteristic in that it is possible to fuse parts of it together very much the same as is done with a metallic filament.

The power-consumption of the lamp is about one watt per candle power, as against 3 to 3.5 watts per candle in the ordinary carbon-filament lamp. An almost equally important characteristic is a high overload capacity; a lamp has carried just twice its normal power without showing sign of failure. The lamp promises to show a long life; experimental lamps have shown life-periods of 485 to 1,270 hours without material decrease in candle power.

OUR NEW ZEALAND LETTER.

Wellington, 15th Feb., 1907.

The Christchurch Exhibition has now been open for three months, and last Saturday the millionth visitor passed the turnstiles. This is a record for the Southern Hemisphere, and the event has been duly celebrated. The millionth visitor, Miss Alice Jenkins, of Montreal Street, Christchurch, received, besides a testimonial, a gold watch and chain, with an appropriate inscription. It is a remarkably large attendance, considering that Christchurch has barely 60,000, and the whole colony about 900,000 inhabitants, inclusive of the Maoris.

The general manager, Mr. Munro, is well satisfied so far, and he calculates that the deficit, if any, will not be over £35,000, an insignificant sum, considering the tremendous advertisement for the colony. Apart from this, the enormous amount of money spent by oversea visitors, particularly from Australia, more than counterbalances the deficit, and the increased tourist traffic in coming years will bring in further cash results as a consequence of the Exhibition. No doubt immigration will also be stimulated, as many visitors, after getting acquainted with the climate, resources, and prosperity of the colony, will settle down here or induce many of their countrymen to try their fortunes in these happy isles. A latitude of nearly 1,100 miles allows a choice of climate to suit everyone.

Sir Joseph Ward left on January 28th for London to attend the Premiers' Conference. Before he left he was feted all over the colony, from the Bluff to Auckland. New Zealand expects great things from Sir Joseph, and happily all parties are agreed that a better man could not be sent on such an important mission. His last speech was delivered on Saturday in Auckland before a most enthusiastic audience. Canadian manufacturers will be pleased to learn that one of the principal items on Sir Joseph's long programme will be the reciprocal treaty with Canada. Sir Joseph in one of his speeches said:—

"There is no reason why we should not have a reciprocal treaty with Canada. This is essentially a matter at present for the Governments of Canada and New Zealand to go into, and I have already taken the necessary steps to be in a position to discuss the whole matter with Sir Wilfrid Laurier, the Prime Minister of Canada, in London."

On Monday, the 28th ult., a few hours before his departure, the Premier was entertained at a luncheon at the Chamber of Commerce. A very representative gathering of Auckland's commercial men met him there, and the Premier evidently felt at home. Mr. Evans, Vice-President of the Chamber, occupied the Chair (the President, Mr. Macfarlane, being absent), and in a short but happy speech eulogized Sir Joseph on his splendid work for the common good, and on his untiring efforts to place New Zealand in the front rank of the oversea dominions of the Mother Country. He wound up by saying that no better representative could be sent to London than Sir Joseph Ward, which assertion was greeted with applause.

The Premier responded in a short but eloquent speech, expressing satisfaction with the cordial reception he had met with everywhere, and promised to serve the interests of New Zealand to the best of his ability.

In this speech also a desire to have closer connection with Canada was expressed, which statement was boisterously applauded by the members. Let us hope that Sir Joseph will be successful, and that the discussions between Sir Wilfrid and himself will lead to a satisfactory linking up of Canada to New Zealand. New Zealand meets Canada more than half way, and, as the Dominion without a doubt will be the gainer, I do not see why a mutual beneficial understanding should not be arrived at.

Mr. Ross, Canadian Commercial Agent, has paid New Zealand a flying visit, and during the short time at his disposal he visited the Christchurch Exhibition, with which he was well pleased.

The North Island last month was visited with heavy rains, followed by severe floods in some parts, while the South Island has been suffering from drought and bush fires. At the moment all is serene again, rain has fallen in the South, and the North again enjoys a spell of fine weather, which will soon efface the effects of the flood.

COSMOPOLITAN.

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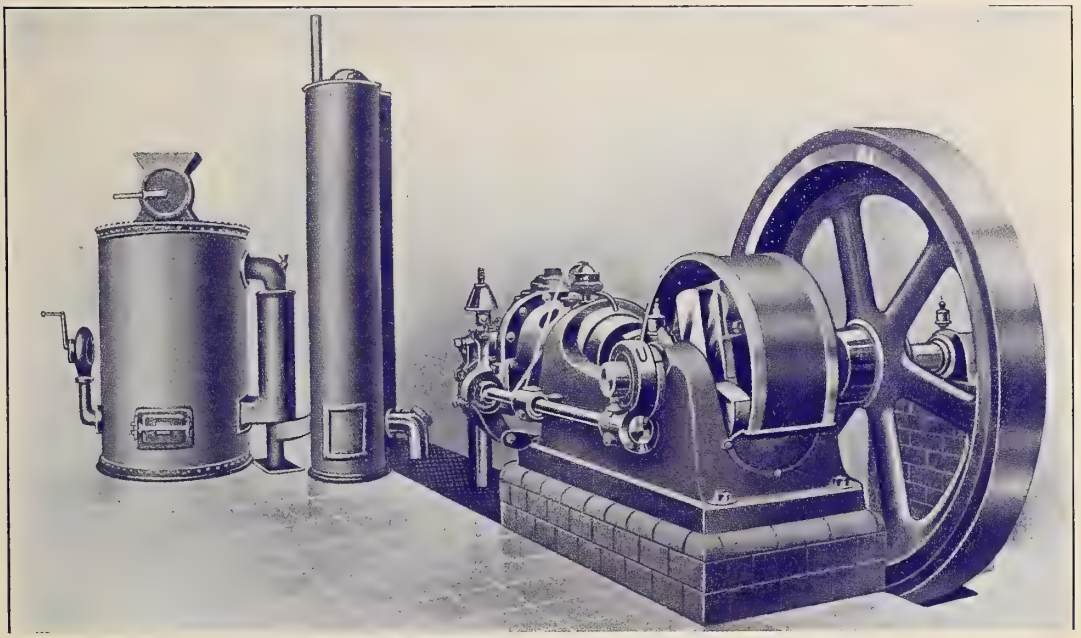
Port Rivalries and Canadian Trade.

The following interesting item appears in a British and South African trade paper: "The importance of the Canadian-South African steamship service to colonial business interests is incidentally demonstrated by the controversy which has followed the suggestion that the Elder-Dempster vessels should break their direct journey up the coast from Capetown to Durban, instead of calling at Port Elizabeth and East London on the return journey only, as at present. There can be no doubt that the service has greatly developed the South African market for Canadian flour under the present system of proceeding as directly as possible to Durban, as this has enabled Transvaal importers to obtain consignments more quickly than by New York steamers; and, though Port Elizabeth is placed at some disadvantage by the existing arrangement, those Durban merchants who claim that an alteration of the order of the ports of call would adversely affect the large import trade in Canadian flour undoubtedly have good grounds for their opinion."

Vol. VII. No. 10 MAY, 1907 $1.00 per year

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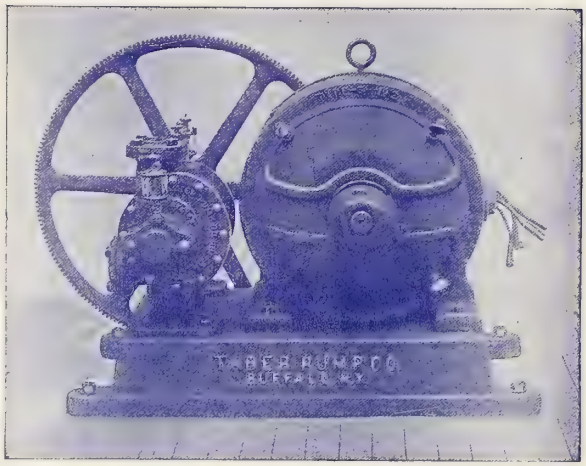
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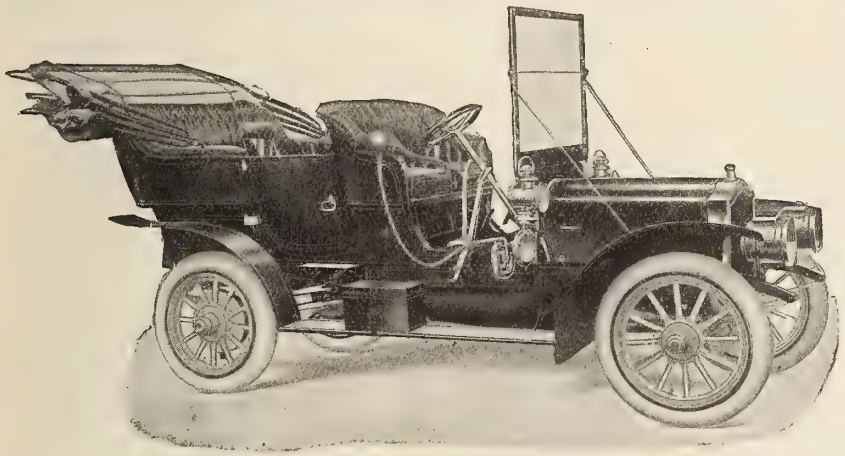
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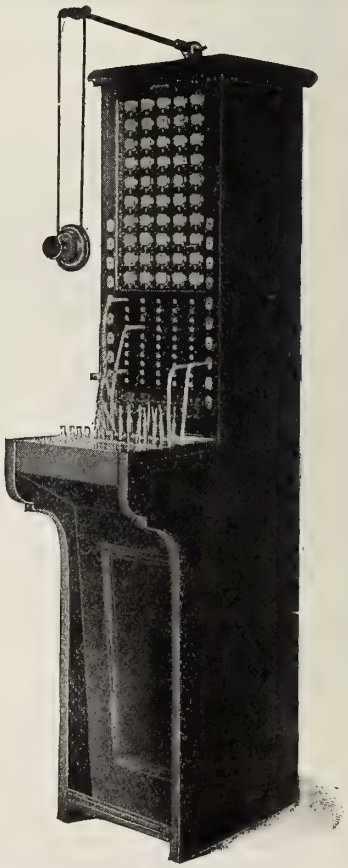
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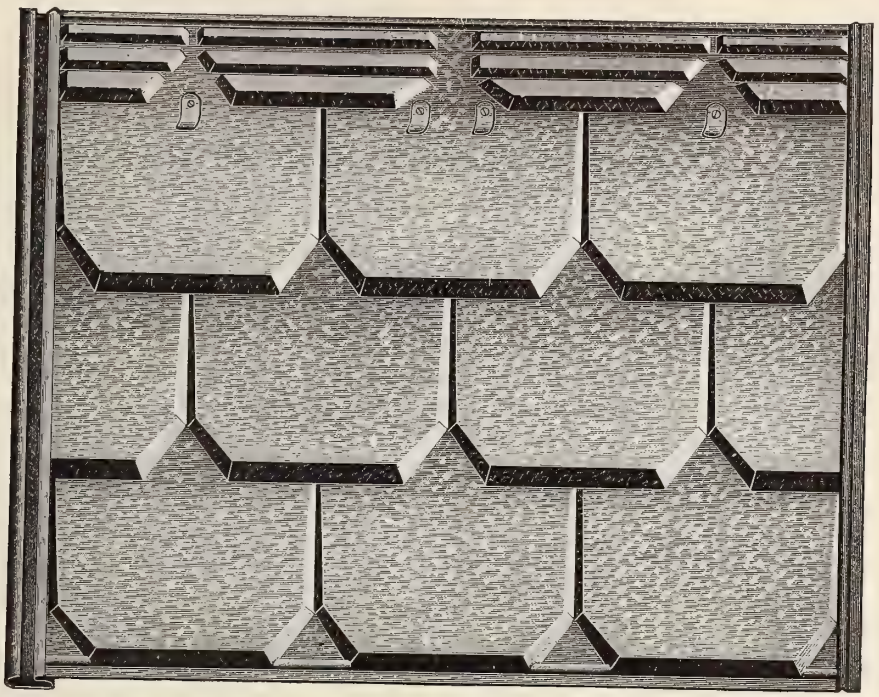
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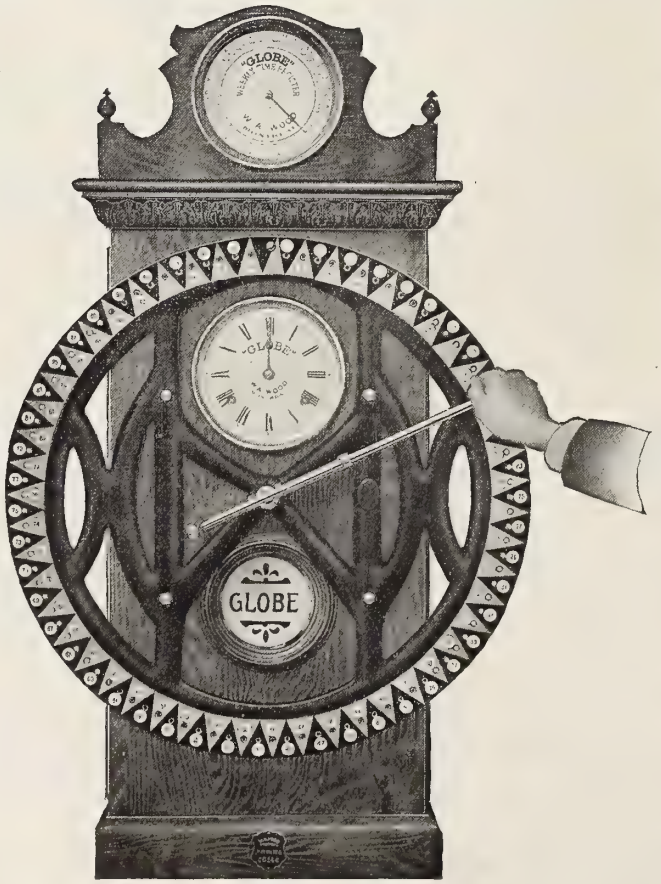
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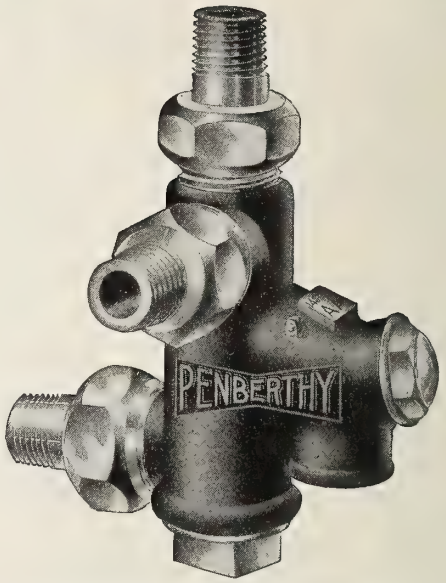
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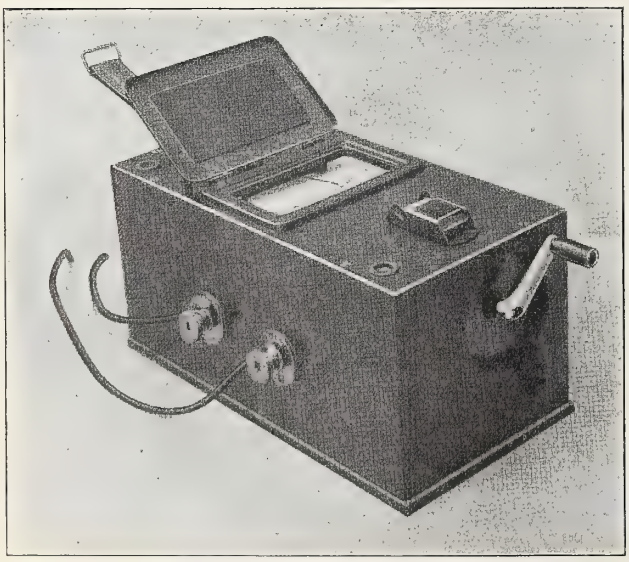
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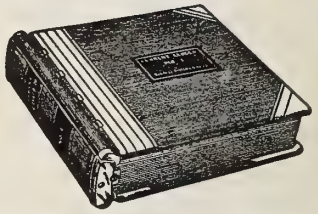
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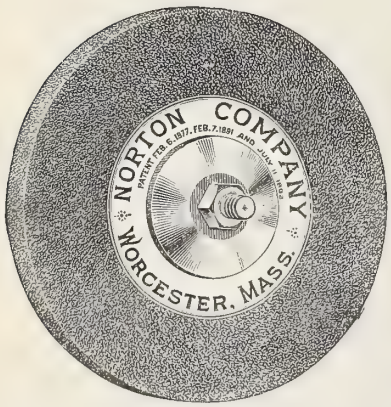


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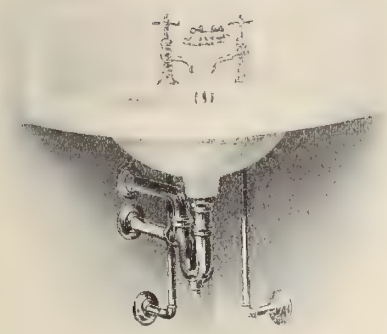
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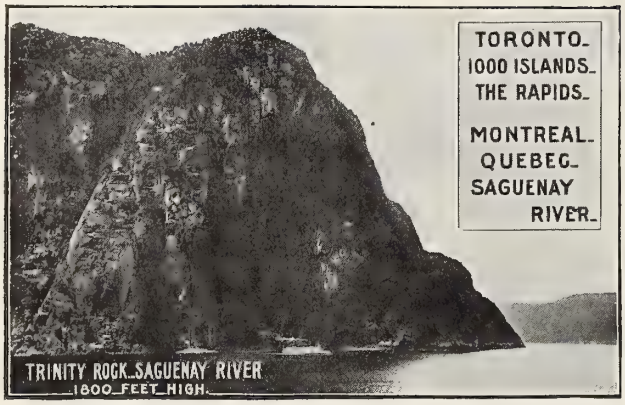
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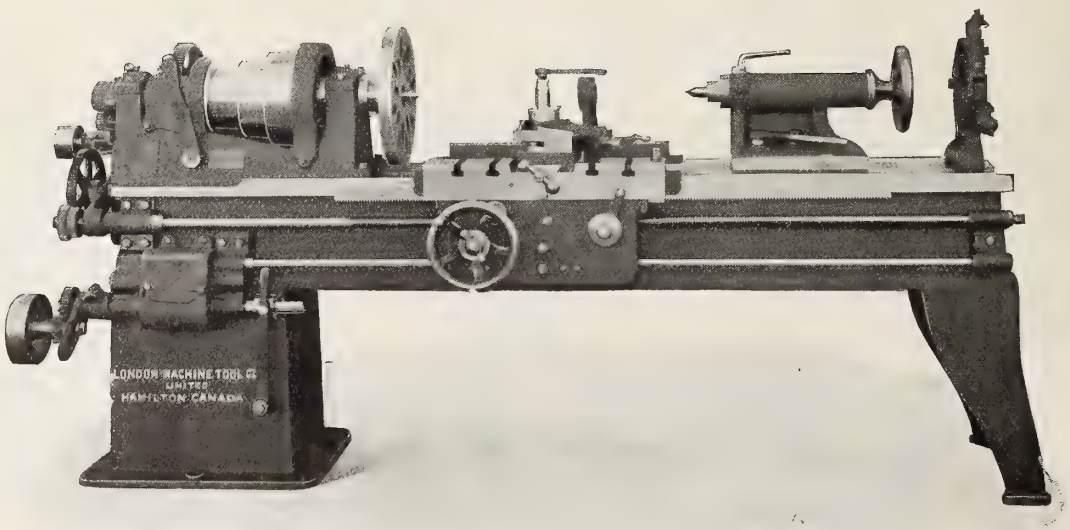
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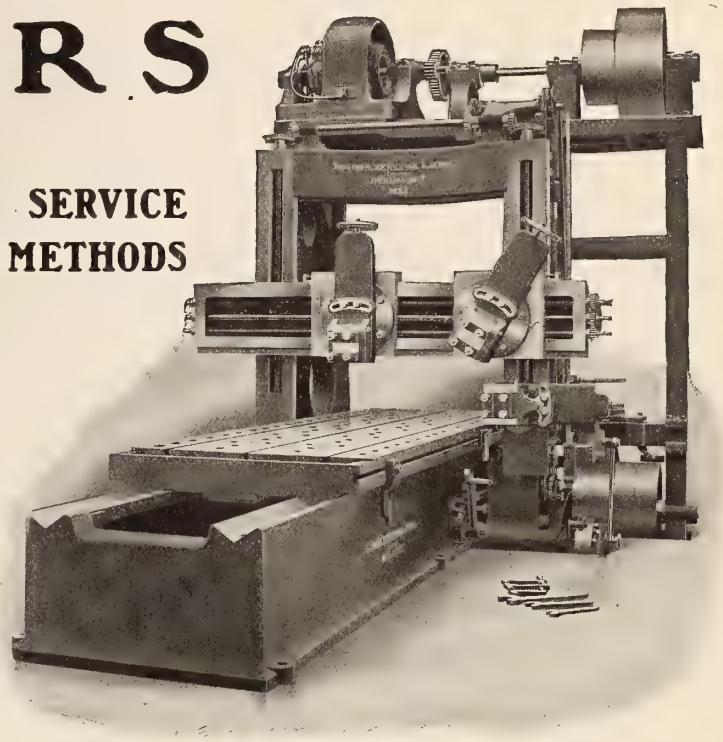
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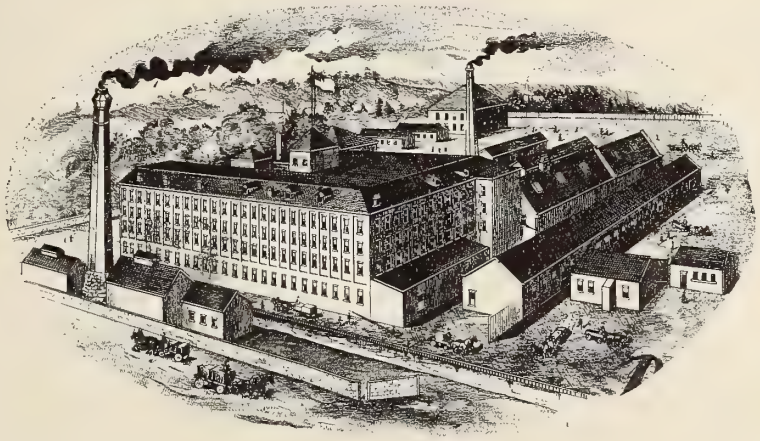
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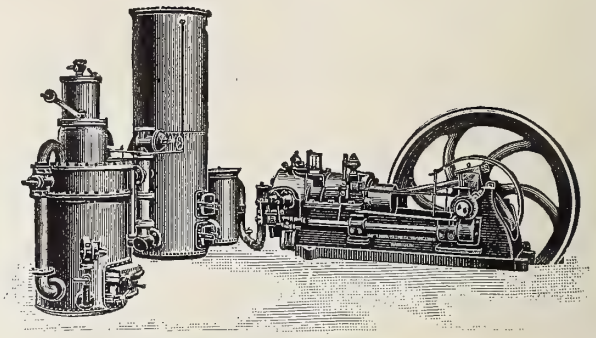
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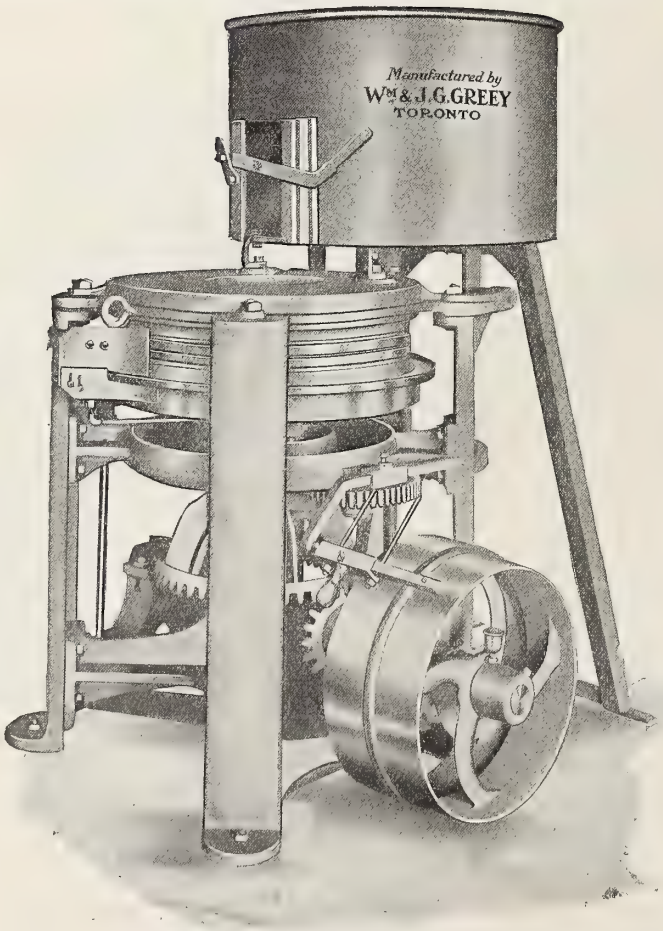
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INDUSTRIAL CANADA

Issued monthly as the the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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MUST PROTECT PROPERTY.

CONSIDERABLE food for reflection was supplied by sity during the past month. The loss of upwards of the two disastrous fires which visited McGill Univera million dollars by fire is always a subject of regret. In the case of a manufacturing plant the loss frequently does not lie so much in the actual destruction of buildings as in the prolonged disorganization of business until the completion of another plant. The fire in the McDonald Engineering Building at McGill was more regrettable still. It involved not only the loss of a magnificent building, but the destruction of a museum of mechanical models and specimens that no money can replace. They were the accumulation of half a century. They were in many cases unique and without counterparts anywhere.

Such a museum and such buildings are great trusts. Recognizing the especial character of this trust the authorities should have made ample provision for the protection of the property. This they apparently failed to do.

In such a building an adequate automatic sprinkler system is an absolute essential. Educational establishments are usually separated by considerable space from other buildings. They are frequently set in spacious grounds. Hence if a fire starts it is most likely to gain great headway before it is noticed. Especially is this the case where the night watchman service is small. In the case of one of the McGill buildings the watchman was not on duty at the time of the fire. The authorities of the University of Toronto employ one man to patrol seven buildings, so that individual buildings are left for two hours at a time without being watched. It requires but a few minutes for a fire to gain such headway that heavy loss is inevitable.

The only sure way to obviate loss, which in the case of buildings such as we have mentioned, usually implies the destruction of collections which cannot be replaced, is by having a system installed which will automatically prevent conflagration. The initial expense at the outside would not be great. The reduction in insurance premiums would counterbalance this in a very short time. The essential point, however, is that trustees who assume charge of museums, art collections, or any other educational or art property, which is invaluable in that no sum of money will replace it, are under the greatest obligation to see that such property is kept intact. The cost of fire protection is not a sufficient excuse for them providing insufficient means for its protection. They are expected to expend their funds as judiciously as possible; but they are expected above all to be able to hand back at any time the property which was entrusted to them.

TRADE WITH MEXICO.

ATENTION is called to an article in the present issue of "Industrial Canada," which summarises some of the observations of Mr. Geo. C. Heintzman, during a recent trip through Mexico. Mexico, it would appear, provides an excellent market for Canadian goods. It is in a prosperous and enterprising condition and is buying extensively from the nations of the world. Towards no country is she better disposed than towards Canada. Thanks to the confidence and enterprise of Canadian capitalists who have done much to develop the natural resources of that country, a feeling of good-will is general towards Canadians. In this we have a marked advantage over the United States. A spirit of distrust still exists towards the latter country.

Canadian manufacturers would do well to look into the possibilities of the market. We should be able to compete on fair terms with the European manufacturers. On the Pacific we have just inaugurated a direct steamship service. This will give us a distinct advantage in the lumber and grain trade. In the East the St. Lawrence route provides a

direct waterway, which is much shorter than that from Germany or Great Britain. The products of the countries are such that a reciprocal trade can be developed.

The richness of Mexico is generally unknown. Her production of minerals alone last year amounted to over $135,000,000. Several other of her natural products are very rich. Her population is approximately 12,000,000. All this goes to show that there must be a vast consumption of goods during the year.

That the Canadians who are resident in the Republic are of an enterprising disposition, is shown by the paper which they issue at frequent intervals. It is entitled "Canada" and contains a full budget of news of this country and our countrymen in Mexico. A recent issue chronicled the organization of a Canadian Club in the city of Mexico. Thus the ground is well prepared. It requires but an active effort to enlarge our trade manyfold.

TORONTO'S HARBOR IMPROVEMENTS.

IN spite of the universal recognition of the importance of water transportation, the citizens of Toronto have gone on year after year, decade after decade, talking much about harbor improvements, but accomplishing nothing. Toronto is naturally well situated with regard to navigation. The sand-bar, which has been thrown up in the course of time, and which has now grown into an attractive island, forms a harbor which, if it were taken advantage of, would be of immense importance to the city. It would serve as a port for all the shipping which the city is likely to need. Moreover a large area of marsh, known as Ashbridge's Bay, provides the means of forming a manufacturing district, which while it would feed the ships that would come to the port, would be admirably situated for taking advantage of the transportation facilities offered both by land and water.

It is no longer necessary to discuss the advantages of harbor improvements. The question to decide is what improvements shall be made, and when. A sub-committee of the Toronto Branch of the Canadian Manufacturers' Association has worked out a proposition which has been subscribed to by practically every important organization of business men in Toronto. The principle of it is that a general scheme of improvement should be adopted on the advice of an expert commission. There is no use having a twenty-foot harbor if the entrances are only twelve feet. There is no use arranging for the entrance of vessels drawing twenty feet if there is not wharfage accommodation for them. There must be co-ordination in the improvements. They must be all directed along some definite plan.

The divided responsibility, more than anything else, has been the cause of the inaction in the past. The city has looked to the Dominion Government to take the initiative. The Government has looked to the city. Meanwhile the city has suffered. It seems preposterous that a city of the importance of Toronto, and with a natural harbor such as Toronto has, should not be visited by the big lake boats. Yet such is the case. The big boats cannot enter the harbour at the present time. The loss is not altogether one-sided either. It is a serious matter for the local business men to be unable to take advantage of the cheap rates by water. The shipping interests, too, are handicapped by having to leave Toronto out of their itinerary.

The suggestion which has been laid before the City Council is big in its outlook. The proposal is that the City Council should at once recommend the creation of a commission of three members, one to be appointed by themselves, one by the Dominion Government and one by the Ontario Government, which should have power to engage competent engineers and prepare an exhaustive report on the requirements of Toronto harbor, and to carry out a comprehensive plan for solving Toronto's entire lake-front problem. This report should be acted on immediately and not pigeon-holed as has happened heretofore. The city should offer to bear all the expenses of this commission and of preparing the report and plans.

The requirements as summed up by these organizations are given in their letter as follows:

"But if Toronto is to progress as an industrial and commercial centre a comprehensive scheme for enlarging and dredging Toronto harbor, widening and deepening the channels so as to permit vessels drawing 20 feet of water to enter, providing adequate dock and loading facilities, straightening the Don, making Ashbridge Bay district available for factory sites, and beautifying the whole lake-front, must be put in execution immediately. Wrapped up in the problem is the question of sewage disposal and water supply. The whole should be worked out in one big plan." This is the first statesmanlike plan which has ever been proposed. It is supported by every business organization. The Mayor and Council have now something definite to consider; something that they can feel sure has the support of the people. It is time for action.

THE NEXT CONVENTION.

NOW that it has been definitely decided to hold the next convention of the Canadian Manufacturers Association in Toronto, the local branch has taken up the work of preparation with a will. Already committees have been appointed for carrying on the preliminary work. It is no mere form of words to say that a successful meeting is assured. During the past two years the members have enjoyed the hospitality of Quebec and Winnipeg. It will be a pleasure for the Toronto members to reciprocate these favors by showing what the Queen City can do in the way of entertaining.

The large number of members situated in Toronto make it an excellent place for a meeting. There is enthusiasm in numbers. It is good for the Association from time to time to visit the branches and show what is being done to safeguard the industrial life of the country. It awakens an interest in the Association's work. But it is well to get back again, too, to where the majority of members may gather, that the big questions which are up for settlement may be discussed, and the feeling of the whole Association may be tested.

This year particularly it is a happy idea to gather in Toronto, because during the year the Association has moved into its new general offices in the Traders Bank Building, and many of the members have not yet had an opportunity of inspecting them. The Association can do much for its members if they will only avail themselves of its machinery more fully. Some of them do not because they are not familiar with its working. The next convention will give them an opportunity of becoming acquainted with the organization. It should result in great good to a large number.

MUTUAL FIRE INSURANCE.

INCORPORATION has now been granted by the Dominion Government to the two Manufacturers Mutual Fire Insurance Companies that have been under way since the annual convention in Winnipeg in September last.

It is now well known that owing to the persistent opposition of the stock companies the government has imposed the condition that each company must put up a "deposit"

of $50,000 in approved securities before a license will be issued, and the stock companies are not hesitating to pronounce the verdict that the imposition of this deposit has sounded the death knell of Mutual Fire Insurance among manufacturers.

Just as we go to press we are able to announce that the insurance committee and the provisional directors of the two companies have held a joint meeting, and that they have reached the conclusion that the companies must be organized ; plans have been carefully thought out, and will be communicated to all members of the Association in a few days. The utmost harmony and enthusiasm prevailed at the meeting, to which reference is made, and the unanimous feeling was that the manufacturers could not afford to have their plans frustrated by any chimerical idea that they cannot provide the necessary "deposits."

ASSIMILATE NEW CITIZENS.

IN view of the fact that the flow of European immigrants to the shores of Canada has been steadily increasing for the past few years, and shows every indication of continuing to increase, it is high time our educational system contained some provision for assimilating Canada's new citizens.

European immigrants, most of them utterly ignorant of the English language, are dumped in Canada and left to shift for themselves so far as acquiring the language and customs of their new land is concerned. No systematic attempts are made by our public schools to teach them English, and yet the acquisition of the English tongue is the most potent factor in the assimilation of the foreigners coming to this country. This question is of importance to every right-minded Canadian, but it is of great practical importance to manufacturers because many of the foreigners coming into the country locate in busy centres, finding employment in factories.

In such cases their inability to speak English is a hindrance both to themselves and their employers. It is true they pick up very rapidly sufficient English to do their work. All of them know what is the matter when the foreman swears at them. But after mastering a few absolutely necessary English words their progress in that tongue ceases. Often adult female foreigners, accustomed to move only among their own people, cannot speak a word of English years after they come to Canada.

If such conditions are permitted to grow worse they will become not only an impediment to industry and commerce, but a distinct menace to the social development of the Canadian people. The segregation of foreign immigrants into more or less self-contained communities has been found a tremendous evil in the large cities of the United States, and the prevention of the repetition of such an evil in Canada should be one of the aims of all public spirited Canadians. Now is the time to safeguard Canadian citizenship in this respect before conditions become really dangerous. Nothing will help assimilate our foreign immigrants so readily as the teaching of the English language, and for this reason the school boards in large cities should furnish every possible means to our rapidly growing foreign population to acquire the language of their newly adopted land.

From interviews with some of the public school inspectors and principals of Toronto, it appears that two special classes for teaching English are provided in the night schools of that city. Each class is attended by about forty pupils, mostly adult foreigners—Russian Jews and Finns. They meet three times a week in the winter months, and learn very quickly. There are no regular classes for teaching English in the day schools, but special efforts of the teachers in spare moments and after hours are devoted to teaching backward pupils the rudiments of English. Special arrangements are also made in the day schools for promoting foreign children who are placed in lower grades till they master simple English words. It would, of course, be futile to attempt to teach adults in the day-time as they could not afford to lose the time and money involved in remaining away from work.

The school officials are fully alive to the importance of teaching English as a factor in the assimilation of Toronto's rapidly growing foreign population, but think they are doing all possible with the limited facilities at their disposal. It is estimated that there are now over 5,000 foreigners in Toronto. Surely there are more than eighty adults in that number requiring instruction in English ; yet that is all who attend the night schools for this purpose.

The school board might well make investigation, therefore, with a view to providing more special classes for teaching English in the night schools and possibly establishing special classes for this purpose in the day schools. The night classes in English might also be continued in the summer season. The example of Chicago, New York, Boston, and other cities across the border in the provision made for teaching English might well be followed not only by Toronto, but by Montreal, Hamilton, Winnipeg, Vancouver and other centres where foreigners are much in evidence. We recommend this subject for the earnest consideration of educationalists throughout Canada.

A MARKET IN THE WEST INDIES.

GENERAL interest has been aroused in the subject of trade with the West Indies, by the recent trip through the islands of representatives of Canadian Boards of Trade. The delegates, in their reports, have been unanimous in their expressions of surprise at the total amount of business these islands transact. That Canada was not getting a greater share of it was accounted for largely by a lack of knowledge and appreciation of the importance of the market. Mr. H. B. Schofield, who represented the St. John Board of Trade, comments on the situation as follows:—"There are certain things one can think about, which, if they existed to-day, would unquestionably give Canada a very much larger share of the West India trade than she has at present. The first is a weekly service. The second is a company in St. John or Halifax making a special business and a special study of the export and import trade of the West Indies and British Guiana, to compete with the New York houses already established in this trade. The third is the extension of the British preferential tariff on the part of the British West Indies and British Guiana.

"New York now controls a very large amount of this trade, by reason of the very many facilities a large business centre always commands; and there would be more or less difficulty in wresting such trade from them, so that any company such as the one referred to should necessarily take every precaution to investigate the trade conditions before they launched into an enterprise of this kind, as they would naturally meet great competition from such a centre as New York.

"The main object of having such a company at the seaboard is to overcome the very much complained-of delay in shipping goods from inland points. All staple articles, which are sold on the market, cannot be successfully handled by dealers in the West Indies when they are subjected to such delays as those have been which have been coming from inland Canadian points.

"A man who handles flour in the West Indies, for instance, purchases on cable advices from New York, and can figure almost to a day when it will arrive; and he sells ac-

cordingly. But he has found by experience when buying from inland Canadian points that the market has perhaps gone off before the goods reach him, and he loses money, and is not apt to repeat the operation.

"There are some resident commercial agents in the larger centres in the West Indies who are building up a very successful trade for Canadian houses; and unless salesmen are sent regularly and systematically to canvass trade a greater success can be made through these local agents. We found a few Canadian houses making considerable progress, chiefly by paying attention to and studying out every detail connected with their particular lines. Now the importation of sugar from the West Indies has turned the balance of trade so much in their favor it has naturally strengthened the sentiment in favor of buying Canadian goods, and the time seems to be opportune, especially in view of the almost certain adoption of a preferential tariff within a few years, for any Canadian handler of staple goods, or manufacturer who has a surplus for export, to get a foothold in the Islands and British Guiana."

CANADIAN TRADE BY CANADIAN PORTS.

THE new tariff regulation whereby raw sugar from British Colonies will receive the benefit of the Preferential Tariff only if it is imported direct by ship to a Canadian port, is an advance towards the development of our own ports and shipping. As was to be expected such a measure could not be adopted without a temporary inconvenience or monetary loss being entailed upon some section of the public. When the agitation arose a few years ago to encourage Canadian coast towns by granting the British Preference only on goods imported by way of Canadian ports, it was at once pointed out that the ports of New York, Boston and Portland presented many distinct advantages as ports of entry. They had far more ships entering from Great Britain; the utmost facilities were provided for handling and forwarding goods; there were more railway lines running out whereby distribution could take place with the least delay. Canada's winter ports were lacking in practically every one of these respects. So in the present instance sugar refiners urge that New York is the best port for them, giving quicker and more satisfactory service, etc.

The objections are perfectly fair. But the essential point to be considered is this: Are Canadian ports such that they may be developed into ports in every respect the equals of those on the United States seaboard? If they are then we must agree that in doing our business through New York or some other United States port, we are building up that port at the expense of our own.

No one will question the great natural strength of our harbors. During the summer months we have the biggest ocean liners coming up to Montreal, into the very heart of the country. Quebec is the terminus of the big Empress boats of the C. P. R. line. As winter ports Halifax and St. John could be developed so as to be unexcelled anywhere. Thus we have the first essential.

Granted this, we must make a start sometime. The more business we do through Portland and New York, the better, naturally, will become their equipment. Greater pierage, harborage and warehouse area will of course follow. Hence the longer we put off bringing our own ports up to the required standard the more apparent reason will importers have for sticking to the old routes.

We must make a start. The encouragement given by having the Preference apply in the case of sugar only when the product is imported via a Canadian port, will no doubt be somewhat burdensome to the sugar refiners for a while, but as the facilities for handling freight at our ports are improved, these disadvantages will disappear. When these ports do become big thriving cities, as they undoubtedly will, it will be a source of gratification to the refiners to reflect that they were the first to make the sacrifice for the common good. The railways will be able to handle additional freight. The Government's general policy is to make the present ruling general as soon as the G. T. P. is constructed to the coast. This is as it should be. Even those in the Maritime Provinces, who are most anxious for the change, would not want the scheme defeated by an inability on the part of the railways to handle what comes into the port.

A development of harbor facilities, an increase in Canadian shipping, and an enlargement of our means of transportation by land, will combined make us ready in a very few years to handle our own water borne freight. When this condition is established we may expect to see grow up on our Atlantic Coast cities to rival in prosperity and enterprise, those along the coast to the south of us.

THE CONCILIATION ACT ON TRIAL.

THE new Industrial Disputes Act is on trial. A condition has arisen in the western coalfields which fairly falls within the scope of the measure. A steady supply of coal is an absolute necessity in the west. During the summer an immense amount of freight has to be moved. The whole development of the country depends upon an adequate railway service. There is no other means of marketing the grain; there is no other means of distributing the necessary supplies to the ever-increasing population. We expect three hundred thousand immigrants to come into the West this year. They have to be transported there. Their effects have to be freighted in. Yet trains cannot be moved without coal. Moreover, the industries of the cities are dependent upon the coal supply. Coal cannot be carried from the eastern fields. The whole people are absolutely dependent upon the mines of Alberta and British Columbia.

A prolonged cessation of work in the coalfields means more than an interruption of development. It means an intolerable hardship to those who are settled in the country. The winters are of such severity that a fuel supply is as necessary as water. The terrible position in which settlers were placed last year through the shortage of coal must not be repeated. In encouraging immigrants to come here the Canadian Government places itself under an obligation to see that the necessaries of life are within the reach of the new comers. They manifestly fail to do so if they allow them to suffer through a lack of coal.

It was to meet just such an emergency that the Industrial Disputes Act was passed. The public would not have subscribed to a measure which would have taken the control of a man's factory away from him. So long as the public is not seriously affected, any dispute between a manager and his men must be left to themselves for settlement. The case of the coal miners is different. The general aim of the Industrial Disputes Act is to prevent the public suffering unnecessarily through a situation over which they have no control. The present dispute manifestly comes under this heading.

The Conciliation Act has been brought into action. What will be its result? The spirit in which it has been received by the miners does not bode well for its future success. The Act provides for the enforcement of its provisions by fines and imprisonment. Still the workmen have refused to return to work pending the finding of the commission of arbitrators. This attitude is not conducive to a satsfactory settlement.

The Department of Labor will not often have a dispute which demands as strong and instant action as this does The West must have coal. Public opinion will speak with no uncertain tone when the Commission makes known its finding. Ample justice in as far as the public can give it is assured to both sides. But if the employees refuse to submit to the provisions of the law, which compels them to work during the time of investigation, then the public will expect the full enforcement of the penalties for their refusal.

UNSATISFACTORY BILLS-OF-LADING.

WE can scarcely believe that the railway companies were in earnest when they submitted their draft bill-of-lading to the Board of Railway Commissioners, for approval. The old forms have been under fire for years. They were hedged around by every known condition to avert liability from the companies. A shipper could not send goods under the plain conditions authorized by the Railway Act. He was compelled to sign a form exempting the carrier from every liability, other than that of gross carelessness.

It was intended that the proposed new bill-of-lading should not be burdened with these unfair conditions. The Canadian Manufacturers Association have strenuously demanded a clean bill-of-lading. They have insisted that the bill-of-lading should be purely and simply a receipt for the goods, and that freight should be carried subject to the liability of common carriers. This is as the law provides. What would be the use of having a law defining the responsibility of railway companies, if they could free themselves from that responsibility simply by compelling shippers to sign a form exempting them from any liability? Yet after months of consideration, the traffic managers of the principal companies have submitted a form containing the old objectionable features, in, if possible, a more aggravated form.

The Railway Act is specific in its clauses. Companies operating under charter are compelled to carry all traffic offering, at a rate approved of by the Board of Commissioners. They are insurers of the goods in transit, and in case of injury, loss, or destruction, are held responsible. Such being their legal status, it is preposterous that they should be allowed to relieve themselves of liability in any way. The public have the right to ship goods, and have them delivered at the point of destination in good condition. The shipper cannot accompany his shipment to see that care is taken in handling, that the goods are not subjected to fire, that they are not injured in countless possible ways. These are things he must leave to the carrier; and the law says that the carrier shall deliver them at their destination in good condition. The carrier is an insurer of the goods.

The Railway Commissioners must not approve of the forms of bills-of-lading which have been submitted. They contain conditions which are unreasonable, and contrary to the provision of the Railway Act. They are in opposition to the whole spirit of the objections which have been urged for years against the old forms. Strong objections have been already made to the Board. A more complete case will be stated when the Commissioners consider the matter officially. Following the lead of the Canadian Manufacturers Association, the Board of Trade in Toronto and other municipalities have passed resolutions calling for a clean bill-of-lading. Nothing short of the complete elimination of the conditions which relieve the carriers of liability will be acceptable. The form which is now adopted will in all likelihood remain in force for a considerable time. It is all the more necessary that it be equitable and in harmony with the provisions of the Act.

COMMENT OF THE MONTH

An Inventor's Prophecy.

A good deal of interest has been stirred by a signed prophecy of Thomas A. Edison detailing what our large cities will be like one hundred years hence. He says they will be free from smoke and steam, and that the chimney will be a thing of the past, while the waste of coal and other fuel will be stopped through the use of electricity, generated direct from the fuel without the aid of engine, boiler or dynamo. In factories each machine will have its individual motor. Houses will be heated electrically, and most of the cities' noises will cease. Skyscrapers will be universal in the business section, and the streets will be bridged over at different heights to facilitate transits from one side to the other. He estimates that buildings will then average thirty stories in height, and the greater number will be constructed of concrete and steel. Such buildings, he says, will stand a thousand years or longer.

Of Interest to Exhibitors.

At the next convention the Commercial Intelligence Committee of the Canadian Manufacturers' Association will recommend the appointment of a permanent committee to collect and disseminate information regarding international exhibitions. Canada has made good use of these exhibitions in the past, to advertise her advantages. In Europe heretofore they have been used chiefly to reveal the rich fertility of our soil and to attract immigration. More recently, in New Zealand, we have been represented by a fine exhibit of manufactured articles. Over fifty leading manufacturers showed their goods there under the efficient superintendence of Commissioner Burns. We have the satisfaction of knowing that the Canadian court and exhibit were without exception the most attractive on the grounds. Canada's trade should benefit as a result. But there are other exhibitions where manufactures might be displayed to advantage. It will be to get in touch with these that the new committee will be advocated.

Filing Catalogues.

Every one whose business requires him to have on hand a large supply of trade catalogues and price lists, knows only too well the difficulties that are met with in endeavoring to keep them in a tidy and systematic file. They come in all sizes, from the vest-pocket edition to the quarto volume, in all shapes, from the modest little straight edge oblong to the latest novelty, whose contour resembles the article it is supposed to advertise, and in all thicknesses from the leaflet or folder to the encyclopaedie catalogue of the department store. Some are big enough to stand upon end and have a label on their back to show what they are, others have to be put in a heavy manila envelope to keep them from getting lost; some open up from the long side, others from the short; some have substantial covers of cloth or stiff paper, others have no covers at all; some are sewn or stitched at the back, others are tied with baby ribbon like the valedictory address of the sweet girl graduate. Everything goes so long as it's a catalogue.

Why can we not have a little more uniformity in size and shape? It is true that variety is the spice of advertising, and that the size and shape of catalogues are looked upon as legitimate objects for the exercise of the genius for variety. But there is something to be said in favor of consulting the convenience of the people who wish to keep this class of literature by them for reference purposes, and catalogue houses might do worse than get together with a view to standardizing the sizes of trade publications.

Eliminate Unfair Clauses.

Strong objections were made to the Stationary Engineers' Bill, which was passed at the 1906 session of the Ontario Legislature. The measure was unfair in several particulars. Most of the objectionable features were eliminated in the amended bill which passed the House during the session which has just came to a close. For instance, steam-heating plants, operating at a pressure not exceeding 20 pounds, have been exempted from the operation of the Act. Had last year's regulation remained in force it would have worked a great hardship in many cases. Again last year's Act contained a clause providing for the re-registration of all stationary engineers each year. This left too much power in the hands of the Association, with which such registration lay. It was pointed out by manufacturers that if a man once passed a fair examination and proved his competency to run an engine he should be allowed to act as engineer for life or during good conduct. There should be no call upon him to take out a new certificate each year. This view was so manifestly fair that the Legislature adopted it. Men who are now actually running engines of 25 horse-power or over will be granted certificates without examination. Other changes have also been made, which, with the ones mentioned, make the Act satisfactory.

A Panacea.

Has Mr. Williams discovered the sovereign cure? Those who listended to his words of hope and optimism at the recent luncheon of the Toronto manfacturers could not but feel that the millenium was at hand when such conditions as he outlined could exist. Mr. Williams is the great Canadian exponent of welfare work. There is no labor problem in his factory, although he employs over four hundred hands.

The General Trouble.

No labor problem! In these days of disputes and dissensions, of insufficient laborers, of inefficient workmanship, the question of labor hangs like an incubus over every industrial enterprise. It is that which makes it impossible to figure on work a month ahead. It is that which causes the unrest and the consequent unwillingness to invest money in productive enterprises. The natural development of the country, which is now for the first time suffering from real growing pains, is retarded because of it. It is the one great danger to the harmonious striving of the whole nation for the common good. The labor question is disintegrating in its tendency.

Welfare Work as a Remedy.

Into the gloom of these reflection Mr. Williams lets the clear sunlight of his methods. He is not a visionary. Welfare work pays, he reiterates again and again. It is as a financial investment that he urges the general adoption of methods similar to those which he has found so successful in his own business. And what are they? Simply the transference of the responsibility from himself to his workpeople. Four years ago he first tried the experiment of consulting his employees, and forming from them an executive committee upon whom would rest the responsibility of producing the departments downwards. Every foreman became virtually the chairman of a committee of which every employee of the department was a member. They advised together regarding the most economic means for turning out their work. They in every case assumed the responsibility which was placed upon them. They were intrusted with the control of a department; they prided themselves upon running that department so as to show the best results at the end of the month and year.

Results from Welfare Work.

Results in Mr. Williams' case have been in the highest degree satisfactory. In output they have shown that under the present system 430 people are doing ninety per cent. more work than 522 did under the old one-man power method. The hours in the meantime have been reduced from 60 to 50 per week. The benefits have not been all one-sided either. The 430 employees drew in wages last year $28,000 more than the 522 did four years ago. Results are what count. In most businesses profits are cut so fine that welfare work will only be considered when it is shown that it can be carried on without financial loss. In one representative factory it has proven to be most profitable. The company has to show for its efforts a steady, satisfied staff of employees, earning good wages, taking a personal interest in the factory, constantly using their heads to better the product, to cheapen its cost, to introduce improved methods. There is no question about the results. Welfare work has paid. Is this the cure for labor troubles?

A Decided Improvement.

Ontario's new act to provide for the licensing of stationary engineers furnishes an excellent illustration of "How to Do It." as contrasted with the illustration of "How Not to Do It," given in last year's act. Ostensibly designed to afford a greater measure of protection to life and property, the Carscallen Bill only served to antagonize capital by making the engineering trade a close corporation under union domination. The Monteith Bill has found favor with capital, without doing organized labor any injustice; by taking the whole problem under the wing of the government, and making it responsible for the issuance of all certificates. The framer of the old act, over-zealous for the union, would have placed a hardship on the manufacturer by limiting the supply of a very necessary kind of skilled labor; the new act is so designed as to make it comparatively easy for the employer to get all the licensed help he requires. Formerly the non-union engineer might have experienced some difficulty in securing a permit to practice his vocation owing to the necessity of passing an examination prescribed by men, the majority of whom were likely to be interested in keeping the trade a close preserve for their colleagues; under the new law certificates will be available for all competent men, irrespective of labor affiliations. The old act required practically every steam heating plant operating at a pressure of two pounds or more to be in charge of a licensed engineer; it was capable of being construed in such a manner as to force the employer to engage none but certificated men for minor positions around the engine and boiler room; it virtually placed in the hands of the union a weapon with which the union could enforce its demands, in that it gave that body control of the engineering trade throughout the Province. The new bill seems to have avoided these extremes. It has been carefully drawn with a view to doing justice to

all interests, while at the same time affording the much desired additional safeguards to the operation of steam plants. Instead of legislation for the classes it is legislation for the masses, and as such it is deservedly popular.

Stamped Envelopes.

The opinion has been freely expressed in some quarters that the Post Office Department should adopt a more progressive policy in regard to the supply of stamped envelopes.

It has been pointed out that the United States Post Office issues envelopes in thirteen different sizes, in four different colors and in four different denominations, while the Canadian post office issue them in only one size, in only one color and in only two denominations. Our No. 7 stamped envelope is sold at $22.00 per thousand. Across the line it can be bought for $21.40 per thousand, with the senders name and return address printed on each envelope. In Canada it is not the custom of the department to allow rebates for envelopes spoiled in directing. In the United States they are redeemable at their face value in stamps or other stamped paper on application to any postmaster.

A Great Convenience.

While their present use in Canada is limited among business men it need scarcely be pointed out that they might easily be popularized, for in some respects they are a great convenience. By their use the time ordinarily taken in affixing stamps is saved, and a disagreeable labor is avoided. With stamped envelopes there is no danger of stamps coming off in the mail as sometimes happens under the present system to the annoyance both of the sender and addressee. Perhaps the strongest argument in favor of the use of stamped envelopes is that they put a check on the petty thieving of dishonest office help, for the stamped envelope bearing a printed return address is of little use except to the rightful owner.

Departmental Opposition.

From the departmental standpoint there is a good deal to be said against any extension of the system. In the first place it would involve a large expenditure for new machinery, a separate machine being required for each size of envelope. The rapidity with which these machines work is such that in a month at the most they could turn out a supply that would last the country for a year. The remaining eleven months they would be idle. The United States with her 80,000,000 people might easily keep these machines in steady operation, but not so in Canada, with her paltry 6,000,000. A costly system of inspection during the process of manufacture would be required in order to safeguard the revenue. A tremendous increase of vault accommodation would be necessary to store the envelopes until called for. The distribution, at present effected without cost by means of the postal cars, would with larger quantities have to be effected by freight, thus adding another item to the expense.

Unfair to Manufacturers.

It is altogether likely that a proposal to extend the system would meet with strong opposition from the manufacturing stationers, who have already large sums of money invested in plant. Nearly all of these men have had to purchase machines for making odd sizes of envelopes which it really does not pay them to run, yet they have to have these machines in order to retain their customers for standard sizes. If the Government were to start up in competition with them on an extensive scale it might easily cut the heart out of their business, thus doing them a serious injury and itself no real good, for the revenue would be less than from the manufacture and sale of stamps.

May Invite Foundrymen.

It has been suggested that the American Foundrymen's Association should be invited to meet in Toronto in 1908. This is one of the most influential of the big international organizations of manufacturers, and for years it has been carrying on a work of education and advancement among its members. One of the most noticeable features of its conventions is the exhibits of foundrymen's machinery. These comprise all the most recent developments, and the most up-to-date inventions along this line. It is worthy of mention that it was this association which standardised the analytical test for steel and iron. If it is decided to invite the members to Toronto, and they accept the invitation, the founders of Canada will enjoy a profitable season.

Forests Disappearing.

The National Hardwood Lumber Association at its recent meeting in Memphis adopted a report that presented the dire possibilities of the destruction of the forest in the short period of thirty-five years. It was estimated that there now stood in the United States in the neighborhood of 1,475,000,000,000 feet of lumber, but that 45,000,000,000 feet of lumber was being cut every year. The report recommended that something must be done and done immediately. hibition of log exports and exemption from taxes of tree plantations. Attention was called to the desirability of State legal enactments along the last line and some constitutional provision by the General Government of like effect. Mention was made of the custom prevailing in France of requiring a tree to be planted for every tree cut down.

The Humor of Strikes.

"I see th' sthrike has been called off," said Mr. Hennessy. "Which wan?" asked Mr. Dooley. "I can't keep thrack iv thim. Somebody is sthrikin' all th' time. Wan day th' horseshoers are out, an' another day th' teamsters. Th' Brotherhood iv Molasses Candy Pullers sthrikes, an' th' Amalgymated Union iv Pickle Sorters quits in sympathy. Th' carpinter that has been puttin' up a chicken coop f'r Hogan knocked off wurruk whin he found that Hogan was shavin' himself without a card fr'm th' Barbers' Union. Hogan fixed it with th' walkin' dillygate iv th' barbers, an' th' carpinter quit wurruk because he found that Hogan was wearin' a pair iv non-union pants. Hogan wint down town an' had his pants unionised an' come home to find that th' carpinter had sthruck because Hogan's hens was layin' eggs without th' union label. Hogan injooced th' hens to jine th' union. But wan iv thim laid an egg two days in succession, an' th' others sthruck, th' rule iv th' union bein' that no hen shall lay more eggs thin th' most reluctant hen in th' bunch."

A pressed steel car wheel plant is about to be established at Montreal, according to recent report. There are distinct advantages in this class of wheels over the usual cast wheels. Graham Fraser is the capitalist who is said to be behind the enterprise.

A Canadian shipbuilding plant will be established at Fort William. The Company which has it in charge is made up of prominent Chicago and Canadian capitalists. It is understood that an investment of $2,000,000 will be made for construction and working expenses.

MUST DEVELOP OUR OWN RESOURCES.

A correspondent to the "Montreal Gazette" discusses the possibilities of the paper industry of Canada. His observations will be of general interest, inasmuch as Canada has it within her power to play an important role in the paper trade of the continent. He writes:

The Department of Agriculture of the United States issues through the Forestry Service Division bulletins and circulars which are filled with interesting and extremely valuable information. It is unfortunate for the Province of Quebec that these publications are not available for general distribution.

In the Province of Ontario the wisdom of developing a large industrial population is well understood, and she is accomplishing this by preventing the free exportation of her valuable assets of raw materials. This policy has resulted in enormous investments of fixed capital with a corresponding growth of busy population.

The Forestry Division has gone exhaustively into the question of pulp-wood consumption in the United States, bordering on Quebec, and into which most of the pulp-wood goes which comes from Quebec. This has been accomplished through personal touch with the mills, for the reason that the Dominion blue book gives only values, leaving you to guess the quantities. The Department of Commerce at Washington is, however, now giving quantities as well as values. These four states, namely—Maine, New Hampshire, Vermont, and New York—produce over two-thirds of all the pulp produced in the United States, and to do this required, in 1905, nearly thirteen hundred million feet of timber, and of this enormous quantity the Province of Quebec contributed nearly 30 per cent. They tell us that in the six years, including 1905, the increase in the shipment of spruce pulp-wood from Canada has been 83 per cent. They estimate that the quantity of pulp-wood produced in these four states was less in 1906 than in 1905, and that each succeeding year will show a diminution. Couple this, if you please, with the increased annual demand and the quantity they expect to get from Canada assumes startling proportions. For example—when they get the figures for 1906, they expect they will show one million cords from Canada, and that 1907 will show one and one-half million, and that in 1910 it will be nearer three millions of cords than two million cords.

In 1905 the state of New Hampshire used seventy per cent. of Quebec wood in the manufacture of its pulp—last year still more, and each succeeding year will show a greater ratio, provided Canada continues to encourage capitalists and laboring people to go to the States, and furnish them with free raw material where they can build mills cheaper than they can in Canada, and get to market without paying any duty and less freight. Consider that the entire cut of spruce into lumber in 1905, in the four States named, converted into cords, was less than a million and a quarter cords. In other words, without the aid of Canada, the entire cut of spruce for all purposes in Maine, New Hampshire, Vermont, and New York for 1907 would not suffice to provide the necessary raw material for its pulp mills.

If Canadians were to begin now to build mills to convert the raw material sent out of the country into the manufactured article, it would be about 1910 when they would be running, and it would mean an investment of fifty to seventy-five million dollars and an increase in population of one hundred and seventy-five to two hundred thousand. In fact, there would be immigration from the States into Quebec as well as to Manitoba.

Any who express doubt as to the correctness of these statements have only to study the statistics issued from the Department of Forestry at Washingtonn to verify them.

Only a few days ago a new ocean going tug was launched at Portland, Maine, and the fleet of barges are to follow, and for what? To bring Canadian pulp-wood to a Maine mill, which has just exhausted its home supply. Nor is that all, a few days ago another concern leased for a term of years a wharf which is to have a rail connected and to engage solely in handling Canadian pulp-wood. A few weeks ago the writer talked with the reperesentative of a large pulp company located in the state of New York. He was in Canada looking at a large tract of spruce. He said they needed it in their business, but they had no idea of doing any building in Canada.

Then, again, an extremely significant transaction of recent date, in which a large mill in the state of Wisconsin has found it to its advantage to come to the Province of Quebec for pulp-wood, and has already contracted a large quantity to be received during the ensuing season.

WHAT AGENTS TO EMPLOY.

Great trouble has generally been found by manufacturing firms in getting suitable agents to represent them in the Far East. The correspondent of London "Commercial Intelligence" makes some suggestions which should be of value to Canadian exporters.

"The first difficulty a manufacturer meets with," he says, "is that of finding a good agent. I am inclined to believe that this difficulty is greater in the East than in any other part of the world. In every district old-established and wealthy firms can be found, most of whom may safely be placed in the category of have beens. Such firms have a greater idea of their own importance than their business ability warrants, and they demand terms in taking up an agency which are simply absurd.

"In nine cases out of ten it is unwise to appoint as agents in the East old-established, wealthy firms, with a multitude of interests. They have neither the time nor the energy to give to any one department. They think their dignity suffers if they attempt to hustle for business. Should it be necessary to appoint such a firm as agents, the only way in which to make the agency a success is to make such terms as will entail the employment by the agents of a man from the manufacturers works, should the volume of business warrant it. Failing such an arrangement, it is better to give the agency to some local man whose interests are small, but who has energy and good business ability. In such a case it may be necessary for the manufacturer to assist such a man with an allowance for expenses or stock. Where there is sufficient business to repay the expense, it is far better to have a man belonging to the firm to look after its interests first-hand. Another way is for a number of firms to combine, and to establish their own offices and showrooms in the principal cities in the selected district."

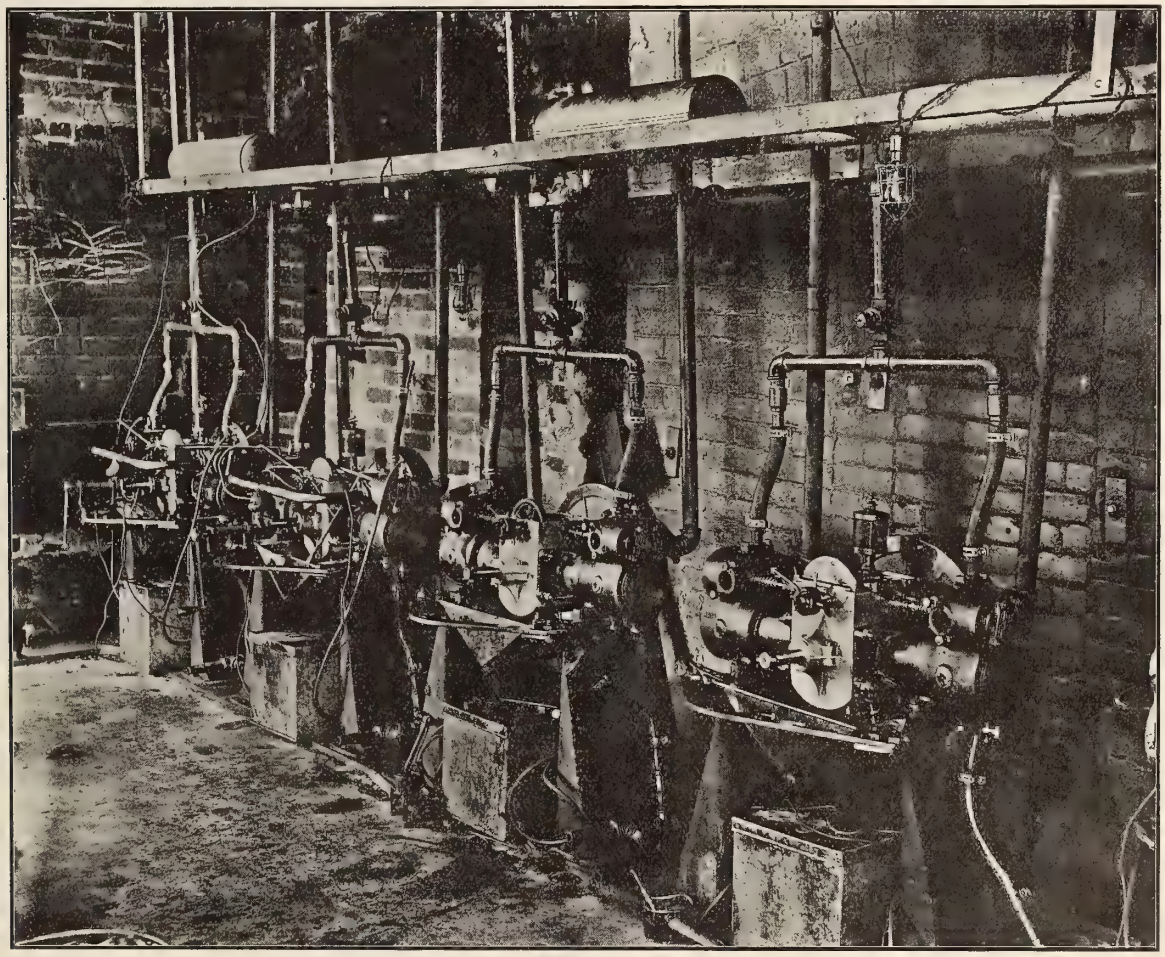
—Mr. K. L. Aitken, Consulting Engineer, of Toronto, presented for discussion a paper entitled "Synchronous Converters vs. Motor Generator Sets," by Mr. Paul M. Lincoln, at the April meeting of the Toronto Branch of the American Institute of Electrical Engineers.

The Pure Gold Company, Limited, of Hamilton, are offering for sale their extensive factory buildings, comprising a floor space area of 85,000 square feet, and eleven acres of land. Complete brick and stone buildings are on the property. It is an excellent location for a manufacturing plant.

THE AUTOMOBILE INDUSTRY IN CANADA.

Made-in-Canada Cars to the Front.

FEW things appeal more to the imagination than the automobile. The beauty of its lines, the luxuriousness of its appointments, the possibilities it reveals for pleasurable locomotion, all mark it as a special object of interest. The observation was recently made that, although the automobile is plentiful enough now to be past the stage of a novelty, yet the public are never too busy to stop and take a look at one, whether in motion or at rest. That just illustrates the point. There is something fascinating about it which is found nowhere else. The exhilaration of an automobile ride is not to be described.



Testing Engines before Assembling in Cars.

A Young Industry.

The years are few since the building of automobiles began in Canada, but a nation, like an individual, may live many years in one. The country's progress in wealth during the past ten years is a thing we may well marvel at. So the automobile industry, though young, has passed through a lusty youth, and is now reaching an early maturity.

The Canada Cycle and Motor Co., of Toronto Junction, blazed the first trail in Canada. It was not an easy task they set before them. Manufacturers of England and France and the United States, making cars for years for an enormous market, had great advantages in Canada, and they used them for all they were worth. But the Canadian idea was growing strong in those same years. It meant something to say an article was made in Canada. The Canada Cycle and Motor Co. went one step farther. They made in Canada; they also made *for* Canada. That was the pivot upon which their business revolved. The idea of a machine made specially to meet local conditions of roads and climate appealed to the public. The future success of made-in-Canada cars became assured.

It was in 1901 that the Canada Cycle and Motor Company began making automobiles. A year later Canadian Motors, Limited, of Toronto, commenced manufacturing electric vehicles. The attempt proved unsuccessful, however, and in the following year this business passed into the hands of the Canada Cycle and Motor Company.

Electric Cars Unsuccessful.

Electric cars have not met with success. Not one per cent. of automobiles are electrically driven. The storage battery has not been sufficiently perfected to make it a practical motive power. Steam locomotion is also impracticable on account of the mechanical skill required to run such an engine, the amount of water which must be carried, etc. The gasoline automobile has become the universally recognized type. It is simple in construction, easy to manage, and capable of running long distances.

The next venturer into the manufacturing field was the Ford Motor Company. This United States firm, recognizing the importance of the Canadian field, established a factory at Walkerville. About the same time the Oldsmobile Company began manufacturing in St. Catharines. Finally, the Chatham Motor Company have begun turning out cars this year. This is the latest of the industries for the present.

The big touring car, as we see it finished, shows little of the intricacy which the individual parts exhibit. Perhaps it is well that it does not. One might reasonably become doubtful of the working of those hundreds and thousands of parts. Yet, as we see when part is added to part and the assembling progresses, every element aims at the double end of efficiency and simplicity. When we see all the different parts of the engine separate we wonder how a working unit can ever be developed from them. When we see the engine complete, with its bearings adjusted and valves timed, we wonder how it can get out of order.

The Automobile in Making.

The making of an automobile carries one through a wide field of mechanics. The romance of metal working is in the moulding shop and the forging department. These are both brought into play in the automobile factory. The bellows wheeze noisily, the flames leap up, the earthern crucible glows red and white as its contents succumb to the intense heat, and melt. The moulder, with his assistant, then lifts out the crucible, with its molten contents, by means of tongs, and pours them carefully into the moulds that are waiting. That is a man's work. It requires skill, and watchfulness, and intelligence. The moulder is no automaton.

Thence they come after they cool in the form of various parts to be machined, it is true, and polished, and buffed, and tested, and fitted, before finally taking their places as integral and essential parts of the lordly touring car; but there before you none the less is the part in embryo. It has assumed its final form, though in the rough.

The Forging Shop.

Parallel to moulding, though of a higher grade, is drop forging. It takes a minute or two for the uninitiated to recover his mental equilibrium upon entering the shop. The din of the hammers drives everything else from one's mind. However, one soon becomes acclimatized, partially, at any rate. Then one is introduced to a scene equally as interesting as that in the moulding-room. The big hammers, each with a weight of many tons, are set before a line of furnaces. One man controls the hammer and prepares the forging. The solid steel bar becomes white in the fire. It is carried over to the hammer and placed on a die. The hammer descends ponderously, and a rough crank-shaft, or something of the kind, is formed. This is heated and hammered, and heated and hammered, and trimmed, until it is a perfect forging. It is a mighty force that the blazing forge and the motor-driven hammer give to the men, but they produce from it what almost defies the power of man to break.

How Parts Are Made.

Let us follow two or three parts through the various processes to which they are subjected. Take the crank-shaft, to which we have already referred. We come upon it first in the drop forging shop. The grimy workman grasps with his tongs a flat piece of steel lying beside him. The steel is of a particular quality suited to the article to be made. It has come direct from the steel mills. He sets it on the forge and stimulates the fire till it burns with a terrific intensity. All the time his eye is on the piece of steel. It must be heated to a certain degree—not more, not less. A steel die is set on the base of the hammer. When the steel is at the right heat, the forger sets it on the die, the hammer descends, and the crank-shaft is cut out. By means of the big hammer it is pounded into shape and trimmed. It then passes to the machine shop.

In the machine shop whatever boring, slotting, etc., is necessary is done. By the time it leaves there all the preliminary work is finished. All that remains is the polishing. Finally, it finds its way to the engine assembling-room.

Automatic Machines Turn Out Parts.

Meanwhile other parts have been in preparation elsewhere. In the big automatic machine-room bolts and casings are turned out with unerring regularity. The automatics are almost weird in their operation. A row of machines are seen with only one attendant for every four or five machines. A long bar of steel is inserted into a receiver; the machines do the rest. Some of them do as many as four different operations, one after the other. There is something fascinating in the monotonous, unfailing approach of a drill, slowly boring out the rod, then the threading of it and the cutting of it off, and again the inevitable drill. Thus are made with speed and absolute accuracy many of the minor parts of the machine.

Cutting Gears.

Cutting the gears is an interesting process. A round disc of specially hard steel is fitted into a machine, and one tooth is machined out. The disc is advanced one cog and another tooth is finished. These gears must be perfectly regular. The disc works around in the machine, and it is so finely adjusted that the last tooth is of exactly the same size as the first.

Many parts are to be considered in the making of the car. Lack of space prevents an extended and detailed account of them. The wooden frame work carries us away from the iron-working departments and takes us to the carpentering and painting shops. The undulating curves in the back of a car were produced formerly by bending single pieces of wood, previously soaked in water. This method has been discarded in favor of the laminated backs. These are made with narrow strips of wood, closely fitted together. Each strip has to be bent to some extent, but a much evener and more uniform shape is made possible.

Great care has to be taken in the finishing of the woodwork. The varnishing and painting is a matter of the utmost importance. The engine and working parts may be of the best, but unless the exterior finish is perfect the sales will suffer. So there are no blemishes in the wood or the finish or the upholstering.

The Final Assembling.

Finally, after the numberless parts of the engine have been assembled, and it has been tested and adjusted, and re-tested and tried out until every part runs smooth and true, it is taken to the automobile assembling department, where wheels and shafting and body and all the rest are collected. The final assembling is carried on with the same care as the previous work. As soon as two parts are brought together they are tested. Thus, the work goes on until the car is complete.

Our Imports and Exports.

The effectiveness of Canadian competition for the Canadian market is shown by the record of imports during recent years. In 1905 there were in all 390 motor cars imported into Canada, of an aggregate value of $453,904. In 1906 the number imported was 448 and the value $645,871. When it is considered how great was the increase in the use of automobiles during that time, it will be recognized that the Canadian manufacturers got the lion's share of the business.

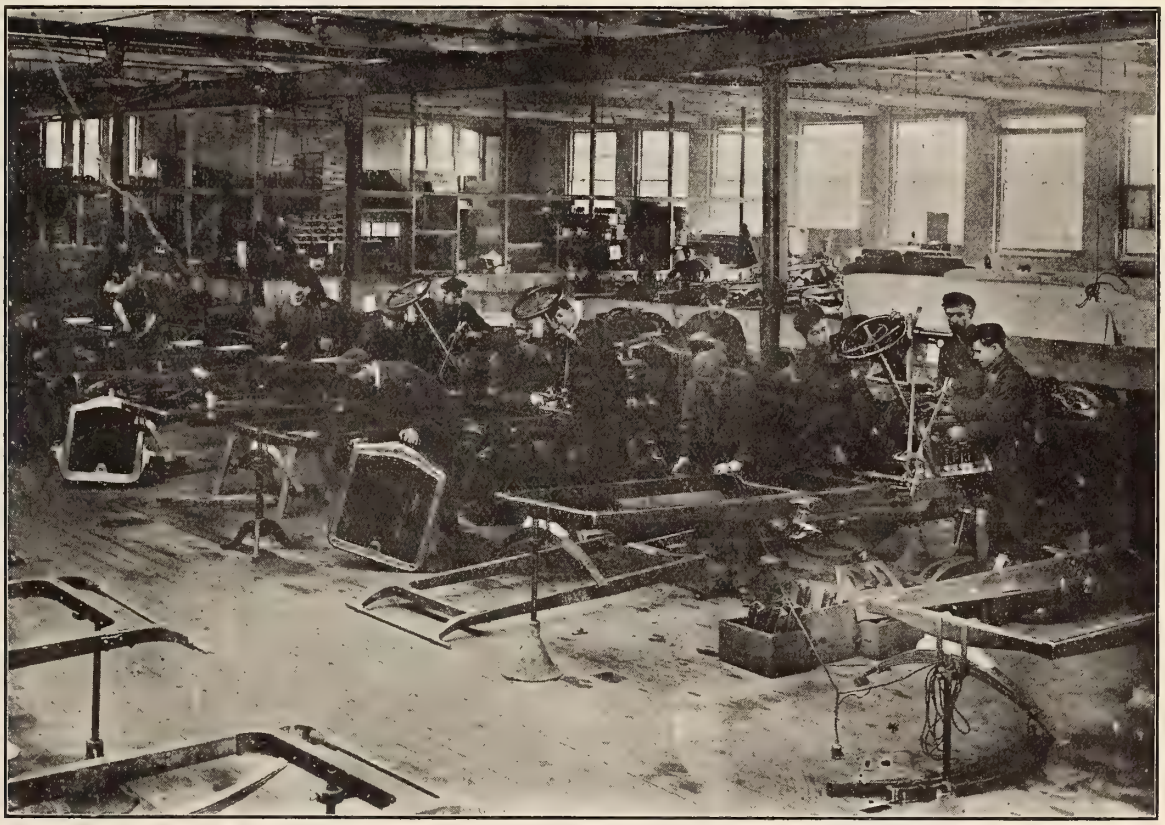
It is interesting to know the source of these importations. Of the 390 imported in 1905, 379 came from the United States and 6 from Great Britain. For these, last year, $421,087 were spent in the United States and $110,630 in Great Britain.

To offset these imports, however, Canada exported automobiles in 1906 to a value of $152,097. This was the first year in which cars were sold out of Canada. That so many were sold in the first year augurs well for the future development of the industry.

Recovering Tin From Tin-Plates.

By far the largest proportion of the tin used in the arts is employed for making tin-plates, and these, in turn, are mainly used for making the tins in which various comestibles are preserved. The total weight of the tin on the plating is said to average 5 per cent. of the total weight of the sheet; and there has been in the past great difficulty in recovering this tin by a commercially profitable process, in spite of the high price of the metal. That contained in the necessary results. The system worked from the heads of solder used in making the joints of the tin can be, and is, recovered by simply heating the tins sufficiently hot to cause the solder to flow; but this process is useless as a means of recovering the rest of the metal.

This feat is now being successfully accomplished at Copenhagen by the Gergsoe process. In this a solution of stannic chloride is passed over the tinned surface when it takes up further tin, forming the stannous salt. The latter is then electrolysed, the additional tin dissolved is deposited, and stannic chloride reformed. The tins can, it is stated, be treated without requiring a preliminary cleansing. A hole is punched in the bottom of each, and a number are then placed in a basket, in which they remain during the whole of the subsequent treatment. When filled, the baskets are placed in a series of tanks, through which flows a 2 per cent. solution of stannic chloride. As this solution flows from tank to tank it gradually becomes richer and richer in tin by forming the stannous salt of the metal, as explained above. From the last tank of the series it is raised into the electrolytic vats by a pump constructed entirely of brass, so as to be unacted on by the fluid passing through. Here the stannous chloride is again reduced to stannic chloride, which is returned to the dissolving vats, whence it picks up more tin, to be again regenerated by electrolysis. The process is



The Assembling Department.

A Promising Future.

Motoring is fast gaining in popularity. Its chief incentives, an expanse of country, picturesque scenery, and good roads, are mostly ready to hand in Canada. Whether it be in the picturesque country, full of romance, of the Maritime Provinces; along the course of the majestic St. Lawrence; through the ideal land of the habitants; or in Ontario, the garden of the Dominion; or again on the western coast where snowy peaks gleam through the interstices of the giant firs, the motor car has unending beauties to explore. In many parts the roads are already excellent. In others they are improving rapidly. The welfare of motorists is watched over carefully by Automobile Clubs, the Ontario Motor League and similar organizations. The industry in Canada has struck its roots deep. It has already grown to a goodly size, but it has a great future in store for it.

therefore a cyclical one. The tin is deposited in small crystals measuring about 1-50 inch long. Being perfectly pure, it is salable at the same price as Banca. The energy expended in the electrolysis is said to be 47 kilowatt-hours per ton of the metal recovered. Though, as stated, the process is a cylical one, the same solution cannot be used for more than three or four rounds of the vats, since it becomes charged with chloride of iron.

Foreign Trade in Plows.

The sale of plows in Scotland has recently been investigated by an American Consul, who has compiled the following information which may be of interest to farm implement manufacturers in Canada.

Scotch farmers prefer a narrow furrow, about 7 inches deep for grain and 9 to 11 inches for potatoes. They do not want the furrow turned over, but set on edge, because, if on edge it will not harden so soon and will be more easily worked. Gang plows are little used. The demand is almost exclusively for the ordinary walking plow with one wheel to the beam, as a rule. Many years ago double-furrow plows were in some favor, but fell altogether out of use. Recently there have been not a few sales of these plows—of Canadian manufacture—to farmers in the lowlands. It is curious to note a tendency among farmers in certain sections to go back to the old Scotch "swing" plow. A prominent dealer in agricultural implements states that many plowmen take pride in their expertness, and, as "anybody can manage a beam which runs on a wheel," they have a fancy for the old and more difficult type of plow. This probably explains the occasional calls for these out-of-date implements. Motor cultivators have not yet been adopted to any considerable extent in this part of Scotland.

Some Objections to Federal Control.

In his book on "Federal Power over Carriers and Corporations" (The Macmillan Co., of Canada. Toronto: $1.50), E. Parmalee Prentice has gone back to the fundamental principles of government to show that recent developments in the United States are not in accordance with the written constitution of the country. The book gives a clear cut and lucid exposition of the whole case of federal rights and federal control. "Those who dread the license of the mob," De Tocqueville said, "and those who fear absolute power, ought alike to desire the gradual development of provincial liberties." The writer shows that although this principle was recognized in the early life of the nation, the clause giving to the central authority "the simple power of regulating trade" has been stretched and twisted until now all commerce and transportation have been held to depend on the Federal government. This is a perversion or at least an unwarranted extension of the original idea. "The establishment of Federal supremacy in commercial matters, involves," the writer says "an alteration of fundamental relations between the States and the Federal government."

To show the original conception of federal rights the history of the constitutional convention is given. From this follows a resume of legislation and court decisions since then. The necessity of federal incorporation marked a crisis. The Sherman Anti-Trust Act is gone into at considerable length. Finally in the last chapter the writer draws his conclusions from the previous investigation. His conclusions compel consideration.

The Tunnel under Detroit River.

The plans for the Detroit River Tunnel are said to have been approved by the Canadian Railway Commission. The project, which is to cost between $7,000,000 and $10,000,000, provides for the construction of two parallel tubes of iron to rest 65 feet below the surface of the water on beds of concrete, and to be flanked by concrete walls. These will give a double track line enabling the Michigan Central and Canada Southern trains to cross beneath the Detroit river.

The tunnel proper is to be 20 feet in diameter, and its roof will be 40 feet below the water. The tracks will be laid on beds of cement. The length of the tunnel actually under the river will be 2,625 feet. On the east side there will be an approach of 3,200 feet of tunnelling and 3,300 feet of half tunnelling. There will be a 2 per cent. grade on the west side and 1½ per cent. on the east. It is intended to sink the iron tubes in sections, and then rivet them together and pump the water out. The trains running either way through the tunnel will be propelled by electric motors.

Rules for Tracing Freight.

The Business Men's League Freight Bureau, of St. Louis, and the railways entering that city have agreed upon the following rules for the tracing of consignments of freight that are lost or delayed:

1. That no tracers should be started until a complaint has been received from the consignee on account of the non-arrival of the whole shipment or part thereof, and after a reasonable time has elapsed for consignment to reach destination.

2. That a printed form of tracer should be used, indicating name of consignee, destination, description of articles, number of packages, at what depot delivered, by whom dray ticket was signed, if possible, date on which shipment was receipted for, or in lieu thereof an exact copy of dray ticket showing information as indicated above.

3. The tracers should state whether the entire shipment or part thereof has been unreasonably delayed, and if part shipment, what item or items are short. This should be shown conspicuously, preferably in red ink, so as to be readily observed by the tracer clerk.

4. That all tracing for less than carload shipments forwarded from St. Louis should be done through one office of each railroad, said office to be designated by the individual carriers.

Process for Hardening Iron.

A new process for hardening iron has been developed by two Prussian inventors, who advocate adding to the iron a small percentage of phosphorus combined with a large amount of carbon. The iron is heated in a tempering powder of bone dust to which are added 300 grains of yellow prussiate, 250 grains of cyanide of potassium and 400 grains of phosphorus. The receptacle in which the iron and the ingredients are placed is closed and luted with clay and raised to a clear red or white heat. The material treated is then taken out and plunged while still hot into a warm bath.

It is asserted that the process will harden the surface of a piece of iron weighing 400 pounds to a depth of about .04 inches, and that the iron can neither be cut nor chipped by the best steel used, although it can be readily welded.—American Manufacturer.

BOOKS FOR BUSINESS MEN.

INDUSTRIAL AMERICA.

Laughlin's "Industrial America" (Toronto, The Macmillan Co., 1906) is a conversational book on general topics of interest to thoughtful people. For a thoughtful review of contemporary, industrial, commercial, and semi-political problems, this book can be recommended without reserve. Professor Laughlin is head of the Economics Department of the University of Chicago, and has himself had experience as a man of affairs. His views as here given are as presented in a series of addresses in German Universities on conditions in America, and may be regarded as a faithful portraiture. The multiplicity of topics prevents detailed reference except to say that the author is a healthy individual and still has faith in the non-socialistic future of American society. It is stimulating to hear such a healthy tone of self-reliance and social confidence.—

GOLDWIN SMITH ON "LABOR AND CAPITAL."

"This is an imperfect world," says the Professor in his instructive little book of thirty-eight pages which The MacMillan Company (Toronto) have just issued. All the advantages are not found in any given class in society. If the cottage could peep in some time at the mansion it might see much to reconcile it to its lot. It is a time of unrest however; of changing values; of ambitions and plans and combines among labor as well as among capital.

The author urges the lesson that work is the basis, the only permanent basis, of reward and progress. He suggests if with us organized labor squeezes too hard it may yet make the Orient the industrial centre of the world; for capital has wings and the east latent powers.

It is a time, he further suggests, when patience and sympathy and forethought are necessary on both sides. Overhaste means ultimate reaction. There is no jumping into the millenium. Read the book.

A BOOK ON BUSINESS.

Seldom do those who have won success take the trouble to set down for the guidance of those who come after them the principles upon which their success was attained. In "The Making of a Merchant" (Chicago: Forbes & Company, $1.50). Harlow N. Higinbotham has performed that service in a most acceptable manner. Mr. Higinbotham himself rose from the lowest ranks to a partnership in the firm of Marshall Field. He will also be remembered as the President of the Columbian Exposition in Chicago. A book on business from such a man could not but be immensely valuable.

Mr. Higinbotham gives the result of all his experience in the present volume. He discusses commercial life from the entrance of the boy on his future career, through every stage of his progress. Although the book is written specially for the merchant, its words of advice are generally applicable. Particularly are the four chapters on credits of value.

TRADE PUBLICATIONS.

Wm. and J. G. Greey, Toronto, have issued an attractive and comprehensive sectional catalogue, illustrating their lines of paint machinery, color and ink and printers' roller-making appliances. The catalogue is very complete and is published in an attractive form. Although just department of the firm's machines is illustrated, it takes a book of eighty pages to cover the ground. Every machine is illustrated by half-tone cuts.

An artistic booklet has come to the editor from the Canadian General Electric Company, giving an interesting account of the works of that company and the Canada Foundry Company, by Augustus Bridle. It consists of a re-print of articles which appeared in the "Globe," Toronto, on March 2nd. The booklet contains many illustrations of the various departments of these great industries and, together with Mr. Bridle's descriptions, provides a most entertaining account of the work carried on.

A special supplement of the "Rideau Record," of Smith's Falls, contains an account of the progress of the Frost and Wood Company. The front page gives a bird's-eye view of the present plant which has just been completed. Photographs of the officers of the company are also reproduced. The history of the company's progress is most interesting. It dates back to 1839, when the original member of the firm ran a small shop in Smith's Falls. Year after year since then it has branched out until now its business extends from coast to coast. The last disastrous fire which the company had served one good purpose. It enabled them to rebuild a plant which would be modern in every respect. The account before us shows that this has been done.

—J. F. B. Vandeleur, Mining Engineer, Toronto, has issued two catalogues describing Evershed's Portable Ammeters and Voltmeters, and Evershed's Bridge-Megger. The former contains full descriptions, with illustrations of these electrical apparatus. To those who are interested in this class of goods the catalogue will be of great benefit. The second booklet discusses fully the subject of bridge-meggers. It gives a full description of the uses and construction of these articles, with illustrations.

A booklet descriptive of the Globe time recorder has been received from D. Fleming, Sales Agent for Ontario. It describes how a perfect record is kept of every employe, when he comes in and when he goes out. A fac-simile of a day's records gives a concrete example of the work. Punctuality and regularity mean much in a factory. If the clock effects those reforms it will be of value.

Improvements and additions to the extent of upwards of $15,000 are to be commenced at once at the Woodstock factory of the Canada Furniture Manufacturers, Limited. This enlargement is being made to entirely complete the chair-making department of the plant.

The city of Stratford will guarantee the bonds of the Cline Furniture Co. and the Kurtze McLean Co., to the extent of $12,000 and $10,000 respectively.

FOREIGN TRADE NOTES.

Newfoundland's Tariff Changes.

A recent report from the Canadian Commercial Agent in Newfoundland states that in order to provide against the dumping of foreign goods into Newfoundland, and to protect the revenue as well as the local manufacturers the following duties are to be made specific instead of ad valorem:

Cut and pressed nails	.....	1 cent per pound.
Shoe brads and tacks	.....	½ "
Galvanized nails	.....	1-3 "

Packages containing these goods will also be subject to duty.

The duty on soda and fancy biscuits is to be reduced from 3 cents to 1½ cents per pound, the government having reason to believe that the price has been unduly raised in consequence of the formation of a trust by the local biscuit makers.

Too Many Commissions.

"In the majority of instances it is impossible for a Canadian manufacturer to secure a market in Australia," writes Mr. J. S. Larke, "except by direct representative or a commission agent on the spot. It is possible, however, to pay too many commissions. When in Canada I agreed to find a representative for a manufacturer in this country and succeeded in doing so, but after some correspondence, I was advised that the matter had been transferred to the head office in the United States, which had made an arrangement with a New York export firm. This export firm, I am now advised, not having a branch in Australia, arranged with an Australian house to handle the goods, but this Australian house has no equipment for selling these articles. It in turn has transferred the business to a commission man. The consequence is that there are three commissions to be paid, where at the outside there should be but one. So far no business has resulted, and there is some doubt if, under the circumstances, very much is likely to be done. In the close competition that prevails in the export trade, there are few lines of manufacturers that will stand such a loading as this."

Implement Manufacturers.

Napoleon once said that every square yard of land reduced from a state of nature to a state of cultivation broadened the foundation of civil liberty just that much. This sound, economic truth can be paraphrased by saying that with the manufacture of every additional implement there is added to the superstructure of our world-wide reaching civilization a stone that lifts it that much higher into the sunlight. In earlier days the tool was the symbol of industry and progress, but the tool has now lost its identity in the mighty machine that moves its thousand arms to toil for man. But the implement remains; it is wielded and used by the individual, and it is his companion and agent.

The implement of to-day, in its magnificent and watch-like niceties of construction, is the measure of man's progress from the infancy of racehood to the present. A great thinker once said: "Show me a people's songs and I will show you their progress in wisdom." Better might he have said: "Show me with what aids the people tempt the fruitful soil to yield of its abundance, and I will show you what has been their progress from barbarism to refinement."

The agricultural implement maker stands close to the heart of humanity. He appeals to the individual, to the desire to advance, to the spirit of industry, to hope and ambition. He is the genius of our civilization, the pioneer of true and abiding progress, and the arbiter in the great make-up of our destiny for good in the onward march of all peoples to our ultimate aim and end.—"Export Implement Age."

The Supply of Pottery.

A few years ago the pottery markets of the world belonged to England. Changes have taken place during the past few years which have altered that condition. The British Tariff Commission found the following conditions obtaining:—

"The world's use of pottery ware has undergone great expansion in recent years, but the British pottery industry has not expanded accordingly, and has failed to keep pace with the home demand. Foreign pottery manufacturers, however, are largely dependent upon British clays; and the export of this British raw material to foreign pottery manufacturers has more than quadrupled in the last thirty years. The British export trade in pottery has remained practically stationary for the last 25 years, while the export trade of the chief foreign competitors has shown great increase. The United States continues to be our chief export market. But British exports to that country have declined especially since the imposition of the McKinley and Dingley tariffs; and the decline in the last fifteen years has been 40 per cent., while German exports to the United States have, on the other hand, increased 160 per cent. in the last 6 years. British exports to Germany have fallen away from the average of the seventies, and are now considerably below the average of the last ten years. In the case of Canada the increase has been 100 per cent in the last twenty-five years, and has been especially marked since the establishment of preference; in the case of Australia, where there is no preference, there is a heavy decline; and South Africa, where there is a preference, now approaches other self-governing colonies in importance as a market for British pottery. Foreign pottery manufacturers are, however, gaining an increasing hold upon British colonial markets.

New Patents and Designs Bill.

The text of the new Patents and Designs Bill of Great Britain has now been published, and is intended to prevent the following abuses:—

1. The taking out of patents in the United Kingdom by foreigners, not for the purpose of working them here, but in order to prevent them being worked.

2. The expensiveness of litigation, which makes it possible for a powerful foreign syndicate to crush a comparatively poor British inventor out of existence.

3. The securing of patents in vague, ill-defined terms, especially in the case of chemicals, by foreign syndicates, which makes it possible to initiate litigation on the plea of infringment of patents.

4. The licensing of British manufacturers by foreigners to work a patent on condition that no subsequent improved patent can be used by them for a long term of years.—Trade and Commerce Reports.

PORTAGE LA PRAIRIE, MANITOBA.

A Growing Centre of Industrial Life.

PORTAGE LA PRAIRIE, MANITOBA, a beautiful city of 6,000 inhabitants and rapidly growing, situated 56 miles due west of Winnipeg, on the main line of three great transcontinental railroad systems, and on the Midland branch of the Great Northern Railroad, from St. Paul and Minneapolis, which latter terminates there, stands to-day a glowing tribute to the faith, pluck and determination of early settlers—the pioneers—many of whom are still happy, prosperous citizens of that important city.

In the days of the red man and the ox cart, the strip of country that lies between the Assiniboine River, on the south, and Lake Manitoba on the north, was known as "Big Portage" for the reason that travellers going south or north were compelled to portage supplies between the two waters above mentioned. Portage la Prairie became a reality—a thriving little village during the year of 1870, but probably 10 or 15 years previous to that time the Hudson's Bay Company had established a fort and trading post (as shown in cut) at a point on the banks of the Assiniboine River, two miles west and a little south of where the city of Portage la Prairie stands to-day, and this old fort stood, weather beaten, but withall fairly substantial, until the autumn of 1906, when it was reduced to fire wood.

Portage la Prairie was incorporated as a town in 1880, and struggled along growing slowly but substantially. In the year of 1883 a Board of Trade was organized, and from that time the place has never ceased to create an interest, whenever Western Canada has been mentioned.



The Geographical Situation of Portage la Prarie.



Old Hudson Bay Company Fort.

Of course Portage la Prairie suffered with the rest of the country as an aftermath of the boom days of 1881, but to-day she stands at the very head of the list of Western cities for beauty, civic pride, and the stamina of her business methods. Although her population increased slowly until within the last three years, it grew well, and to-day she enjoys a class of citizenship second to none.

The stranger is at once impressed with the beauty of the city. The clean, broad streets and avenues are lined with granolithic sidewalks and beautiful heavily foliaged shade trees, that lend a freshness to the general appearance, and pleasant rest to the eye. Hundreds of acres of beautiful natural park lands are within ten minutes walk of the heart of the city, to the south; while intervening a large body of crystal water, three miles long and half a mile wide, adds to a scene indescribable for beauty and grandeur.

Many families have removed from Winnipeg and other cities to Portage la Prairie because of its many advantages, and its beauty as a residential centre. The cost of living is comparatively low. The Federal and Provincial Governments have also recognized the importance of the city, and generally healthy conditions that prevail, and have established a number of institutions, that, with the churches, schools, stores and warehouses, rank high for architectural construction and appointment.

Portage la Prairie is surrounded by the celebrated Portage Plains which produce annually nearly ten million bushels of grain, principally Manitoba hard wheat. In the month of February last, at a seed grain fair held in Portage la Prairie, government judges awarded points of 99 out of a possible 100 on samples of red fyfe wheat, after continuous cropping for thirty years.

It does not require close scrutiny of the accompanying map to readily understand the important and advantageous position that Portage la Prairie holds in a territory where an ever-increasing demand for manufactured articles has, and is taxing shipping and distributing facilities to the utmost. Several large industries are located in that wide-awake, progressive city, and they have a well-organized publicity bureau, which, together with the ambitious and aggressive Twenty Thousand Club and Board of Trade, are bidding fair for an equitable share of industries locating in Western Canada.



General View of City.



A Business Street.

Portage la Prairie is only a fraction behind the front in the great race of Western Canada cities.

It has the ambition of civic pride, and the incentive of wonderful opportunity.

Some Results.

The decision of the municipalities of Western Ontario to take power from the Hydro-Electric Power Commission means the installation of eighteen separate sub-stations and distributing systems. Manufacturers in each of these places will install electric apparatus to take advantage of the cheaper power thus provided. The result should be an immense increase in the demand for electric machinery and appliances. It has been estimated that the receiving and distributing system in Toronto alone will involve the expenditure of a million and a half dollars. When this is carried out throughout the western part of the province there will be an enormous demand for electrical apparatus. The work of the Hydro-Electric Commission will be far-reaching in its results.

KEEPING A CIRCULAR SAW.

To keep a saw from heating, the saw teeth and gauge should be suitable to the wood, and the saw should be well sharpened and run at the proper speed. The saw blade should be carefully packed, the feed not crowded and the cut opened out immediately it passes the saw. The saw guide is sometimes continued too far along the face of the saw, and thus crowds and heats the plates through not allowing sufficient room for the wood to open out as it is cut. If the fence extends say three inches beyond the roots of the teeth, it is usually enough.

Heat is often communicated to a saw through the saw spindle, through the bearings being out of order or screwed up too tight, says the "Timber Trade Journal." The saw should not fit too tightly on the saw spindle or bind the steady pin. A saw when hung properly should in the horizontal line incline very slightly toward the timber so that the teeth at the back of the saw may rise without scoring the wood. If the driving pulleys are too small or run at too short centers the bearings will heat.—"Industrial World."

CANADA'S OPPORTUNITY IN MEXICO.

Mr. Geo. C. Heintzman Discusses Trade Opportunities.

THE people of Mexico are anxious to buy from Canada" is the statement of Mr. Geo. C. Heintzman, as a result of his observations during a six weeks' trip through the country. Mr. Heintzman speaks with enthusiasm about the prospects of trade between Canada and Mexico. The Mexicans do not want to do business with the United States. Their previous transactions have not been just of a kind to encourage any development with them. While, on the contrary, they are most favorably impressed with Canadians. Perhaps nothing has contributed more to the latter feeling than the immense development by Canadian capital of the Mexican Power and Light Company in the City of Mexico. The investment of this capital has given the people of Mexico confidence in Canada. As a result they are ready and eager to trade with us.

Mexico's Industrial Situation.

The conditions obtaining in the two countries are admirably suited for international trade. Mexico is not a manufacturing or grain growing country. It has to import practically everything in these lines which it uses. It is immensely wealthy, however, in minerals, coffee, sugar-cane, onyx, marble, mahogany, fruits, and several other raw products. These would provide the basis of a fair interchange.

A Stable Government.

The country itself is prosperous and has great purchasing power. For years it has enjoyed a sound and enterprising government under President Diaz. It is extremely progressive, and offers unbounded encouragement to commercial enterprises. The population is estimated at 13,000,000, and of these approximately 2,000,000 are well-to-do people. The latter constitute the bulk of the buying public.

Mexico City has 45,000 citizens, of whom about 20,000 are of English or American origin. It is a most up-to-date city, containing a fine body of business men, with advanced civic government. There are a number of other cities of less size but of equal enterprise. In all the larger places there is an English-speaking community.

Now is the Time.

Now is the time. Mexico is entering upon an era of development. During that period its foreign trade will advance by leaps and bounds. Who is going to do it? At present Germany is doing a big business with Mexico. The United States, on account of their proximity, are doing much, though the Mexicans would prefer to buy elsewhere. Great Britain also sends a great amount of goods there annually. Canada's trade with Mexico, including imports and exports, has increased from $191,939 in 1902 to $546,888 in 1906. Of this amount $259,372 represents our exports to Mexico, and $287,616 our imports from Mexico. If it goes on at the same rate for the next five years it will mount up to a big figure.

What Canada Could Do.

Canada can supply the things which Mexico most needs. Sawn lumber and manufactures of the same are imported in large quantities from New Orleans. This is a great field for our British Columbian lumbermen. Now that a regular service has been inaugurated by steamship between Vancouver and Victoria and Mexican ports there should be nothing to prevent Canadians from gathering in a large part of this business. When the heavy cost of carrying lumber east by rail is considered the advantage of a market which can be reached by boat is all the more apparent.

No boots and shoes are manufactured there, yet thirteen million people must spend a large sum of money annually for footwear. Canada can supply these. A beginning has been made in the selling of cordage, manufactures of wood, leather, pianos, food stuffs, etc. These can all be followed up to advantage.

Canada Favored.

Canadians are favored over all other nationalities at the present time. The manifest willingness of Canada to meet them half way in the development of an international trade has aroused their interest and good will. The establishment of the direct steamship line on the Pacific, with the aid of subsidies from both governments, has stimulated a keen interest in trade possibilities. There is no time like the present for making a bid for the business. Sentiment is somewhat fickle. If we do not take advantage of it when it is in our favor, we may find it lacking later.

Mr. Heintzman draws his conclusions about trade conditions not from a superficial view. During the six weeks he was in Mexico he visited all the important cities and talked with the leading business men. In every case, he found the utmost cordiality towards Canada. Importers came to him voluntarily and urged upon him the advisability of Canadians pushing business with that country. The feeling seemed general. It was the sentiment, too, of a people who are prosperous, who are undertaking big government works, who are buying heavily from outside nations.

National Development.

The most important of the public works is the Tehuantepec National Railway, a road which has been built and equipped by British capitalists in conjunction with the Mexican Government. This provides the first adequate system of communication across the peninsula. We do not have to resort to the forecasts of the company operating it to see what an enormous influence it will have on ocean traffic. Already the people of British Columbia are talking of shipping Albertan wheat to England by this route. It certainly introduces a new element of the greatest magnitude into the transportation question. The feature about it however, which appeals to us most directly is the impetus it is going to give to trade in Mexico. If we are to get that trade, we must go after it energetically.

How Trade Can be Done.

Canada has a commercial agent, A. W. Donly, in Mexico, who is doing good work in keeping the Canadian public posted on business openings. There are many strong houses through whom business may be done. The latter, however, have had for many years regular firms in the older countries from whom they are accustomed to buy. The only effective way to open up new business is by having a representative on the ground to look after sales. From present indications this would be a profitable investment.

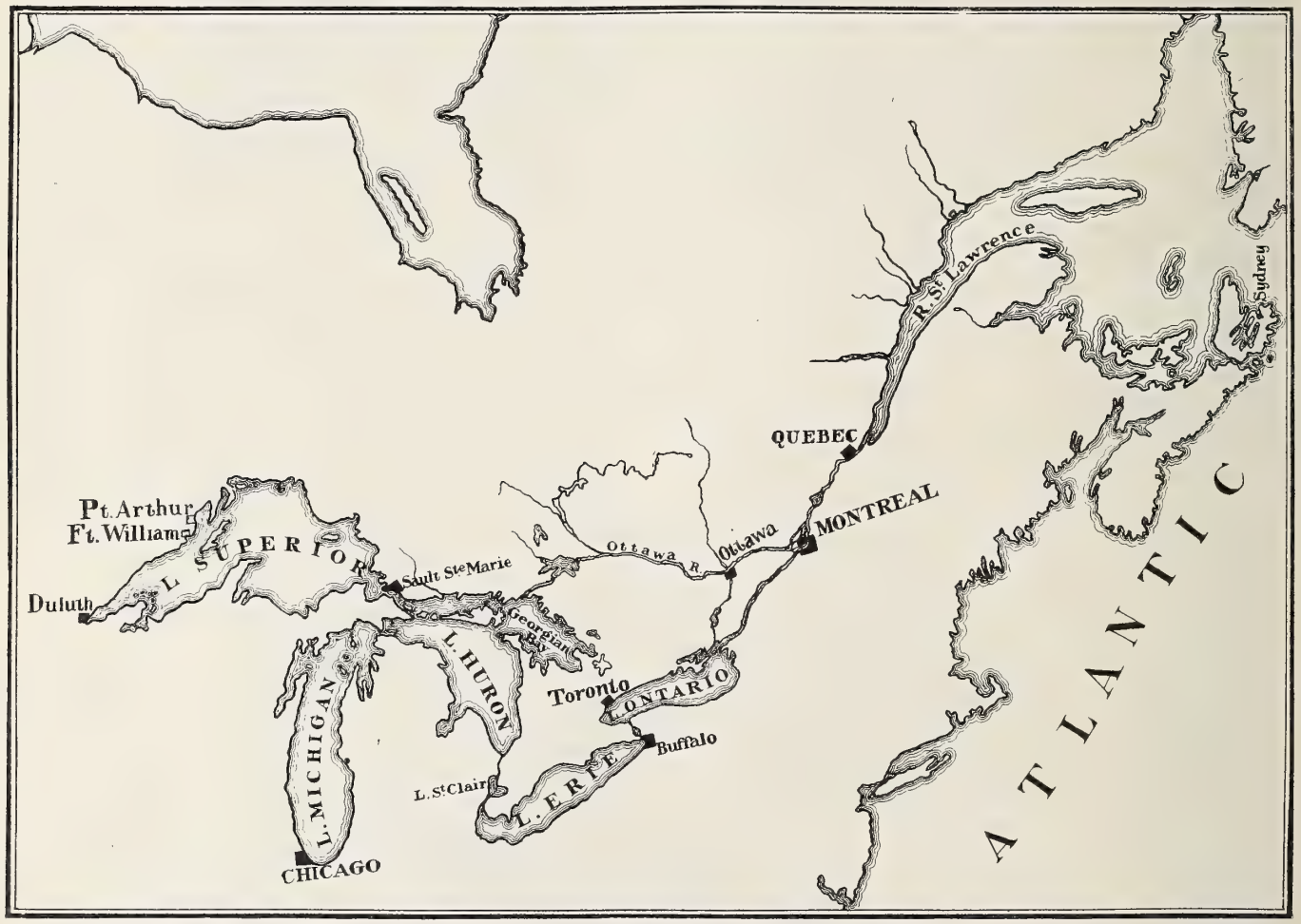
THE GEORGIAN BAY SHIP WATERWAY.

How a Great Saving in the Cost of Transportation can be Effected.

IN an article on Canada's Transportation Problem, which appeared in the April issue of "Industrial Canada," the vital influence of cheap transportation on the material welfare of the country was shown. Efforts are now being made to divert trade from Western Canada over United States roads. The true solution, it was pointed out, lay in opening up new routes in this country, which would supply an adequate service at cheaper rates. From this arose the discussion of the advantages of water routes and particularly the possibilities of the proposed canal via French River and the Ottawa.

It is the shortest through route between terminals, and is unquestionably adapted to navigation of considerable capacity.

The "Engineering News," March 5th, 1902, said editorially: "From an engineering point of view, disregarding for the moment political boundaries, there can be no doubt that the Ottawa route is by far the best for a deep waterway from the upper lakes to the sea. We respectfully submit to the New York Barge Canal promoters the question how their barge canal could hope to compete with such a route. Indeed we may make the question a broader one, and ask



Map showing route of proposed Canal from Georgian Bay via French River, Lake Nippissing and Ottawa River to the St. Lawrence, at Montreal.

It has been customary to refer to this proposition as the Georgian Bay Canal. It is a misnomer to call it a canal. It is a system of inland navigation with only some 36 or 40 miles of canal with 37 locks, four miles in all, and with 21 feet of water on the mitre sills of the locks, with which object the present surveys are being made, and which will float the largest vessel which now goes into the harbor of Buffalo; it should properly be termed "a ship waterway."

The United States Deep Waterways Commission of 1896, speaking of the different routes to the Atlantic seaboard and the Georgian Bay route, says the Ottawa route is a short independent line which may have great value for future development, but its consideration is not now justified. how any route to the seaboard which requires trans-shipment could possibly compete with a route which takes freight on board a lake steamer at upper lake ports and delivers it at tide water without breaking bulk?"

The Route Direct.

As previously stated a glance at the map will show the geographical position of the waterway, and the attractions it offers to the United States North-west; among others the fact that the northern route is cooler, and therefore, there is less danger of heating in transit, which difficulty prevails via the southern routes. In the latter case a guarantee is required of the quality of the grain after the first of April. It will not only afford facilities for the grain traffic but also for

the carriage of meats in refrigerator ships to any port in the world. The following table shows the mileage advantage of the route :

To	Galveston.	New O.	Duluth.	N.Y.
Kansas City	804.5	932	612	1,335
Omaha	895.5	1,070	521	1,402
Sioux City	..	1,258	422	1,422
St. Paul	..	1,269	160	1,332
Minneapolis	..	1,279	150	1,322

Distance Duluth to Montreal, via French River (Georgian Bay route) 997 miles ; Montreal to Liverpool, via Belle Isle, 2,770 miles through ; Kansas City to Liverpool, 4,379 miles, as against Kansas City to Galveston, 804.5 ; Galveston to Liverpool, 4,874, through 5,678 miles, saving by the northern route of 1,299 miles, and a saving of 1,038 miles over the route via New Orleans. Kansas City and the other points above named are used for comparison, as they are the centres of agricultural production in the American North-west at the present time. The Omaha Grain Exchange in its annual report for 1905, referring to the publishing of through rates from Omaha to Liverpool, via the southern routes, says : "The grain is thus permitted to go through without breaking bulk except at the seaport, and without shrinkage, and the taking of tolls at intermediate ports. This means the bringing of foreign markets to our very doors, whereby we obtain the highest prices possible. The result of this condition is worth ten million dollars yearly to the grain producers of Nebraska."

A comparison of distances from upper lake ports is given :

From	To		
Chicago	New York, Lake and Rail, via Buffalo,	1,389	miles.
"	Montreal, Lake and Rail, via Canadian routes	906	"
"	Montreal, via Georgian Bay route	905	"
Fort William	Montreal, via Georgian Bay route,	882	"
"	" via St. Lawrence	1,296	"
Duluth	"	997	"

Advantage in favor of the proposed waterway, Fort William to Montreal, 414 miles to Liverpool, as against the Buffalo route, 1,198 miles.

The saving in distance from Chicago to Liverpool is 1,254 miles, and from Duluth 1,213 miles.

The distance from Winnipeg to Montreal, all rail, is 1,306 miles via Fort William, and the Georgian Bay route 1,309 miles.

It will be seen that Montreal would be nearer Duluth than Buffalo is and Chicago and Buffalo, and Chicago and Montreal equi-distant.

Saving in Cost.

Having thus given an idea of the advantage in regard to distances. We may now consider the question of traffic and the saving to be effected. The matter of tonnage is a foregone conclusion, and need not be here discussed. It is only necessary to refer to the returns of the Soo Canals. In the matter of rates it is apparent that the short line mileage afforded by the route would enable it not only to compete but to control the rates from the territory above mentioned in the United States, and materially reduce the rates on grain from the Canadian North-west.

Very little of the grain of the North-west finds its way to the seaboard all rail. In no year has it exceeded two million bushels. At present the bulk of it is taken to Fort William, Port Arthur, and Duluth, thence by water to ports on the Georgian Bay or Buffalo, and rail from there to the seaboard. A certain quantity has, especially during the past few years, owing partly to the congestion at lower lake ports, gone by the all water route via the Welland and St. Lawrence Canals to Montreal, which, however, necessitated a transfer en route either at Port Colborne or Kingston, more or less shrinkage and extra charge for elevation, all of which adds to the cost of transportation.

The saving in the cost of transport by the proposed waterway can be best illustrated by taking as a basis the rates that prevail via Buffalo, showing the same in detail ; that is to say, the proportion earned by the lake steamers and that of the lines east of Buffalo. For ten years, 1895 to 1904 inclusive, the average rate via Erie Canal, Buffalo to New York, on wheat was 3.15 cents per bushel. The rail rate has varied from 3.4 in 1898 to 4 cents in 1904. These years are quoted from the fact that it may be taken that conditions were normal. The average lake rate on wheat for the five years, 1900 to 1904, was 1.56 a bushel, making the average through rate for five years from the head of the lakes to the seaboard, lake and canal 4.71 cents per bushel. The average cost for receiving, weighing and discharging, ocean vessel trimming and floating elevator at Buffalo and New York, is 2 cents per bushel, making a total cost of 6.71 per bushel to take a bushel of wheat from Fort William and put it on board ship in New York harbor.

What Governs Rates.

Existing routes to Montreal, all water or lake and rail, are practically governed by the rates that prevail via Buffalo. The rates from Duluth to New York via Buffalo is 6.71 cents per bushel. Allowing for the same rate per mile by the Georgian Bay route, with the addition for delays, etc., the cost from Duluth to Montreal would be 2.62 cents per bushel. That is, the latter route provides for putting the grain on board vessel at the seaboard for 4.09 cents per bushel less than by Buffalo.

As to the grain trade of the Canadian North-west the average rate on wheat has been from 6 to 7 cents per bushel, from the elevator at the head of the lake to vessel at the seaboard. The average since 1905 has, no doubt, been somewhat higher than this, as very little of any grain was carried from Fort William to Georgian Bay or Lake Huron ports at less than 2½ cents per bushel. In fact charters were made as high as 6 cents per bushel, with no accomodation east of the lakes to take care of the business. The published lake and rail rate in 1905 and 1906, Fort William to Montreal, was 8.1 cent per bushel.

As to the possibility of the lake and rail lines via Georgian Bay becoming a greater factor in the grain carrying trade of the North-west, a division of a rate of 6 cents would mean that the earning for the rail haul round Georgian Bay would not exceed 3 mills per ton per mile, which is not considered profitable, especially as the lines could not expect to handle any great amount of west-bound traffic ; in fact some of the lines have declined to handle ex-lake grain for export at going rates. So that there is very little likelihood of any material reduction in rates even with improved facilities. Even if it were possible to carry grain at 2½ mills per ton per mile, when there are no return loads inadequacy of terminals would block and delay the business. The time of a steamer in transit from Fort William to Montreal via the Ottawa route should not exceed five days, equal to average time on cargoes via the shortest lake and rail route.

The saving in trans-shipment and elevator charges by this route will go largely to pay the cost of transportation proper, and with control of terminals, including elevators at lake ports and the seaboard, the rate will, no doubt, be lower than quoted.

The tonnage of vessels and trade on the upper lakes is largely in the hands of United States steamship owners. This applies as well to Canadian Lake ports, and will continue so long as steamers with a capacity of from 8,000 to

12,000 tons can be used, as compared with the much smaller vessel of Canadian build, which is necessary owing to our lack of facilities. The working expenses of the large steamer are very little more than a vessel of a quarter or half its size. Therefore not only will benefit be derived from the cheapening of rates on the exports and imports of the west, but shipping ports at the seaboard commensurate with the trade of the country will be built up.

Source of Electrical Power.

The transportation of grain from the North-west is not by any means the only factor entering into this project. It will make possible the development of a region of immense mineral and forest wealth, which absolutely requires cheap transportation, and which is not now accessible. It is estimated that there is from 1,250,000 to 2,000,000 electric horsepower along the route awaiting development, which when utilized in manufacturing, milling, etc., will add millions of dollars to the national wealth. There are large deposits of iron ore, and vast areas of pulp-wood contiguous to the line of waterway, which commodities are now entering largely into the commerce of the country, and for which there is a ready market. The chief item of importance in the westbound tonnage would be lumber, cement, and coal from Nova Scotia.

Distribute Canadian Coal.

Very little of the latter finds its way into Ontario. The cheapness of American coal at the mines and the short haul has practically shut out Canadian coal. No change can be expected in this situation except through improved transportation facilities. The Nova Scotia shippers state that they would be able to compete provided there were facilities to allow a class of colliers in the Sydney-Montreal trade to proceed to the lake cities without breaking bulk. At the present time Ontario contributes between $2,000,000 and $3,000,000 annually to coal duties. It, therefore, might be well to consider the economy of appropriating a portion of this to improved facilities to secure coal from our own coal fields, and become practically independent of the United States for our supply. Coal can be delivered as advantageously to interior points in Ontario from the line of the Georgian Bay route as from the St. Lawrence, Lake Erie, or Ontario. As an illustration : the average lake rate on coal from Lake Erie ports to Lake Huron and Georgian Bay ports is 35 cents per ton. The average rate to upper lake ports is 40 cents per ton. The average rail rate from the mines to say Cleveland is 78 cents per ton, making a through rate of $1.13 and $1.18 respectively. The average rail haul from the mines to the lake front is 140 miles, Cleveland to Fort William about 800 miles, total 940 miles. Sydney to Fort William is 1,697 miles. Taking the lake rate Cleveland to Fort William as a basis the rate Sydney to Fort William would be about 85 cents per ton as against a rate of $1.18 from the United States mines. The rate to Sault Ste. Marie and intermediate ports would be proportionately lower. There is a difference of 33 cents per ton in the rate of freight to Fort William, to this add the duty of 53 cents per ton, making 85 cents per ton in favor of the home product.

As to the effect of the proposed waterway on Georgian Bay ports. It will relieve the lines via Georgian Bay of a class of traffic which it is claimed cannot be handled economically by rail east, and the elevators at Bay ports will be available for the local and milling in transit interests throughout Ontario.

Harbor improvements at these ports will tend more to the advantage and building up of Ontario. Ontario is the manufacturing centre of Canada and should continue so, and should supply the wants of the North-west. The development of her ports will give the benefit of water carriage. On the other hand the farmer in the North-west who wants the output of the factory in the North-west will be enabled to market his crop to the best possible advantage, and finally it will draw together the Eastern and Western ports of the Dominion and offer the chief factor in its prosperity, namely, "Cheap Transportation."

In conclusion it might be said that one of the objections offered to this route has been the shortness of the season. This is hardly worthy of consideration, as it will be noted that Lake Nipissing, the most northerly portion of the route is 20 miles south of Sault Ste. Marie.

Evenness in Hot Blast Temperature.

A very important matter in blast furnace practice is to keep the temperature of the hot blast as even as possible, says Otto Jaschke, in the "Iron Age." Even heat gives an even furnace run and uniformity of product. With the usual equipment of four stoves there will be no two of them giving exactly the same heat. This variation, mostly due to flue dirt in the stoves when there is no cleaning of waste gases, will be shown very clearly in the pyrometer record. Even though all four stoves give the same amount of heat, we can see in the pyrometer record an up-and-down movement, resulting in a saw-tooth line, due to a stove losing from 50 to 200 degrees in one hour. A new or well-cleaned stove naturally loses less than an old or dirty one. The ideal record would be a straight line, and there is a way to obtain such a regular heat.

We have, say, four stoves on a furnace—A, B, C and D—and we want an even temperature of the hot blast of 1,000 degrees. Stove A is supposed to be on wind at a temperature of exactly 1,000 degrees. After 15 or 20 minutes the heat will drop down a little. Now, we open the cold blast valve of stove B, but only so wide as to bring the heat up to 1,000 degrees, say one-fourth. After a while we open the cold blast valve one-half, and so on until it is fully open. Then we go back to stove A and close the cold blast valve for about one-forth, increasing the shut-off gradually until it is closed entirely. Then we take stove C, and start by partly opening the cold blast valve of this stove, repeating the procedure in the other cases. I have seen the working out of this plan so that an even temperature of 900 degrees has been maintained in the blast for 6 or 8 hours. Only two stoves were used in that time. The other stoves had to be closed in order to prevent them from getting too hot, and all the gas could go to the boiler-house. It takes, of course, a good hot blast man to get such results, and to ensure that there is no irregularity in the furnace run. For foundry iron, since it requires a very regular heat, this is especially desirable practice.

A United States firm, making a line of marine gasoline engines that are well and favorably known, is prepared to enter into negotiations with a reliable Canadian house for manufacture of their engines in this country either on a contract or royalty basis, or with a view to organizing a new company. Correspondence is invited from manufacturers who would consider adding a new department of this kind to their already established lines, and who have the plant and funds to push the proposition on a large scale. The address will gladly be supplied on application to the Secretary, C. M. A., Toronto.

Misleading Statements of Insurance Companies.

Published Reports do not Coincide with Returns to Government.

THE articles in the two last month's issues of "Industrial Canada" on the misleading statements given to the public dealt exclusively with Fire Insurance Companies' accounts, but it can be applied equally well to companies transacting all classes of insurance through which the manufacturer seeks to indemnify himself for the various losses he may sustain by reason of fire, sprinkler leakage, boiler explosions, etc.

When the publication of a company's statement in a newspaper, insurance or financial journal, is accompanied by an article purporting to be an editorial, but in reality inspired, eulogising that company in extravagant terms, it is not a mere supposition that the publication of the statement is intended to demonstrate to the general public the advantages offered by that company in the shape of the security it affords to policy holders, for the intention is beyond doubt. Not only are the statements themselves misleading but the fictitious editorials accompanying them are more grossly so. The officials of insurance companies deceive, and often wilfully deceive, the public; the proprietors and publishers of newspapers and journals aid and abet the deceit.

Neither insurance companies, newspaper men, journalists, nor the public seem to be aware that on the Statute Books of the Province of Ontario there is an Act, under which the company or its officials causing the publication of an untrue or false statement as to its financial standing, intended, calculated, or even likely to deceive or mislead any person dealing or having business with it, as well as those publishing such statement, are liable to fine and imprisonment.

Statements Contravene the Law.

This Act is entitled "An Act to prevent fraudulent statements by Companies and others," R. S. O. 1897, chap. 217, and reads as follows:

"(1) Where any advertisement, letter-head, postal-
"card, account or document issued, published or circu-
"lated by any corporation, association or company, or
"any officer, agent, or employee of any such corporation,
"association or company, purports to state the sub-
"scribed capital of the corporation, association or com-
"pany, then the capital actually and in good faith sub-
"scribed and no more shall be so stated, and any such
"corporation, association, company, officer, agent, or
"employee who causes to be inserted an advertisement
"in any newspaper or who publishes, issues or circulates,
"or causes to be published, issued or circulated any ad-
"vertisement, letter-head, postal-card, account or docu-
"ment which states, as the capital of such company,
"any larger sum than the amount of such subscribed
"capital so actually and in good faith subscribed as
"aforesaid, or which contains **any untrue or false state-**
"ment as to the incorporation, control, supervision, man-
"agement, or **financial standing of such corporation,**
"association or company, and which statement is in-
"tended or calculated or **likely** to mislead or deceive
"any person dealing or having any business or trans-
"action with said corporation, association or company,
"or with any officer, agent or employee of the same,
"shall, upon summary conviction thereof, before any
"Police Magistrate or Justice of the Peace having juris-
"diction where the offence was committed, be liable to a
"penalty not exceeding $200 and costs and not less than
"$50 and costs, and in default of payment the offender,
"being any officer, agent or employee as aforesaid, shall
"be imprisoned with or without hard labour for a term
"not exceeding six months and not less than one month,
"and on a second or any subsequent conviction he may
"be imprisoned with hard labour for a term not exceed-
"ing twelve months and not less than three months."

"(2) Any one may be prosecutor or complainant
"under this Act, and one-half of any fine imposed by
"virtue of this Act shall, when received, belong to His
"Majesty for the use of the Province, and the other half
"shall belong to the prosecutor or complainant."

Even if the public were aware of this provision, it is altogether likely it would remain a dead letter for the person misled or deceived by any false or untrue statement has to take upon himself the responsibility of prosecuting the company, or its officials, publishing the statement.

Inspired Editorials.

As it is, however, the public imagines that these "editorials" are honest criticisms and does not realise that they are frequently written by an official of the company to which they relate and their publication paid for at so much per line. It is also under the delusion that a Government License means the Government guarantee of a company's solvency and its ability to perform its obligations, and that it is not therefore necessary to bother about its financial standing.

Until the manufacturer realizes the importance of closely studying the financial standing of the insurance company or companies to whom he proposes to look for indemnity in the event of loss and of thoroughly understanding the extent to which he is "protected" by Dominion and Provincial Governments, the present unwholesome condition of affairs will obtain.

The Law Defective.

It may not be amiss to point out that as the insurance law now stands, no account is taken of the capital paid up by a company's shareholders for the very purpose of forming the foundation on which the financial strength of that company is to be built up. The law allows that foundation on which the whole fabric depends to be permitted to crumble away, until in many cases there is very little foundation left, and a sudden and serious disaster might result in the company crashing to the ground, causing serious financial loss to many who had depended upon it as a source of protection and as an investment.

No bank could keep its doors open a day after its capital was impaired, and the credit of any manufacturer would be seriously affected if his yearly statements showed that he was doing business at a loss and gradually eating into his capital. Surely the wasting away of the paid up capital of an insurance company is as of as great, if not of greater moment.

Paid-up Capital an Investment.

The paid up capital of a company should be regarded by the policy-holders as one of the company's liabilities. They should realize that if the company is so managed or conducted that the money invested in the enterprise by its shareholders is gradually frittered away, the day must inevitably come when the ability of the company to promptly meet its obligations must become affected by the continued loss of capital.

To further serve the purpose of this article another concrete case is taken, no name being mentioned, as it is not our desire to be charged with prejudicing any company in

the eyes of the public. The following is an exact copy of the statement of the company as recently published in three or four insurance journals in this city :

ANNUAL FINANCIAL STATMENT.

Assets and Liabilities as at December 1st, 1906.

Assets.

Cash on hand at Head Office	$1,615.64
Government deposits	45,000.00
Bonds and Debentures	69,950.00
Agents' Balances after allowing for Commission	17,250.00
Accounts Receivable	619.69
Office Furniture and Engineers' Equipment	2,546.15
Premiums due on Capital Stock	2,076.68
Total Assets	$139,058.15

Liabilities.

Bank Balances	$12,717.93	
Claims notified (final papers not received) estimated at	11,268.25	
Accounts payable	3,021.25	
Total Liabilities		$27,007.43
Surplus to Policyholders		$112,050.75
Reserve for unearned premiums		83,316.65
Net Surplus		$23,734.08
Capital Stock Subscriptions available		$305,158.32

Receipts

Cash on Hand, Dec. 31, 1905	$1,340.67	
Cash in Banks, Dec. 31, 1905	4,754.57	
		$6,095.24
Net Premiums		155,951.73
Reinsurance Claims		178.50
Interest Received		1,820.85
Special Services		810.39
Accounts		1,800.00
Bank Balances		12,717.93
Capital Stock, calls paid		65,530.00
Capital Stock, premiums paid		9,400.00
		$254,324.64

Expenditures.

Claims paid	$55,937.63
Reinsurance premiums	10,098.47
Agents Commission, salaries and other expenses	50,978.07
Salaries and all other Expenses of Management	47,115.47
Agents' Balances	18,508.19
Sundry Accounts	121.17
Bonds and Debentures	69,950.00
Balance on Hand	1,615.64
	$254,324.64

The following are extracts from the "editorial" articles relating to this statement :

"Assets for 1905, $88,561.32 ; 1906, $139,058.16 ; surplus to policy holders, 1905, $83,222.20; 1906, $112,050.73; reserve for unearned premiums, 1905, $65,781.48 ; 1906, $88,316.65 ; net surplus for 1906 of assets over liabilities, 23,734.08 ; total receipts for the year 1906, $254,324.64, as against $92,276.79 for 1905."

"The growth of the (company) can readily be seen from the foregoing figures, and it must be conceded that this growth is remarkable for a company doing business only some three years."

"The (company) has had a marvellous record for the three years actual work. A steady and regular accretion every year to each element of growth in a casualty company is good enough for the most exacting and fastidious of policyholders. Strong enough to carry all its burdens, solvent enough to fill every obligation and be prepared for any contingency which may arise—what more could be wished for. The statement for the year 1906 shows total assets of $139,058 ; surplus to policyholders, $112,050, and net surplus of 23,734. The net premiums amounted to $155,951, as compared with $85,948 for the previous year. When it is considered that this admirable result has been accomplished in three years, actual business, the achievement is specially deserving of recognition. The (company) now stands in the front ranks of progressive casualty companies. Its policies are liberal, its management conservative, handling all the modern forms of policies, and with an intelligent and energetic field force, and progressive and experienced executive officers, this (company) merits the attention of the insuring public throughout the Dominion."

Here is the same statement recast in the form in which returns are made to the Dominion Government :

Assets.

On deposit with Receiver General	$45,000.00
Bonds and debentures	69,950.00
Cash at Head Office, $1,615.64 ; cash in Bank, nil	1,615.64
Accounts Receivable	619.59
Office Furniture and Engineers' Equipment	2,546.15
Premiums due on Capital Stock	2,076.68
Premiums in Course of Collection	17,250.00
Total Assets	$139,058.16

Liabilities.

Unsettled Claims	$11,268.25
Reserve on Unearned Premiums	88,316.65
Borrowed from Bank	12,717.93
Accounts payable	3,021.25
Total Liabilities	$115,324.08
Surplus on Policyholders account	$23,734.08
Capital Stock paid up	$129,441.68

Income.

Premiums	$155,951.73	
Deduct reinsurance premiums	10,098.47	
Net premiums		$145,853.26
Received for interest		1,820.85
Received from other sources		2,788.89
Received for premiums on capital stock		9,400.00
		$159,863.00

Expenditure.

Claims paid	$55,937.63
Commission, salaries and balances due agents	69,486.26
Salaries and all other expenses of Management	47,115.47
Sundry accounts	121.17
	$172,660.53

Cash Account.

Dr.

To balance in hand and in banks at January 1, 1906	$6 095.24	
" Income as above	159,863.00	
" Borrowed from Bank	12,717.93	
" Received for Calls on Capital	65,550.00	
		$244,226.17

Cr.

By Expenditure as above	$172,660.53
" Investments	69,950.00
" Balance on Hand	1,615.64
	$244,226.17

This statement reveals a very serious impairment of capital, an expenditure largely in excess of income, no money in the Bank, and only a small sum on hand at the office. This is the condition of affairs after the Company has been doing business, not for "some three years" but within a few weeks of four years. Do the "Editorials" above quoted bear out these facts?

OUR NEW ZEALAND LETTER.

Wellington, March 21, 1907.

What was deemed almost impossible has happened. New Zealand has witnessed a real strike, in spite of Conciliation Boards, and Arbitration Courts; in spite of the law that prohibits striking and threatens offenders with fines and even imprisonment. On the 26th of February last the slaughtermen employed in the large slaughterhouses in the province of Canterbury struck, being dissatisfied with their wages and general conditions in connection with their work. This action caused a sensation throughout the Colony, and though the more thoughtful and moderate element in the Labor Party disapproved of the proceeding, the majority, no doubt sympathised with the strikers.

The Government first tried persuasion, and then threatened with the law, but the men stuck to their guns, and remained out on strike. At last the Labor Department took action and brought the matter before the Arbitration Court. The strikers were fined £5, or $25 each, and in default one month's imprisonment. The men declined to pay, acting under the delusion that they could not be imprisoned. The case went before the Supreme Court, and Justice Cooper decided that the writs of attachment secured by the Labor Department could be made effective at once, as there was no question of a debt, but of a penalty for breaking the law.

After this decision the men hastened to pay the fines, or made arrangements with the Labor Department to pay them in instalments of £1 per week.

There was no feeling of vindictiveness, but the dignity of the law was at stake, and it had to be shown that as employers had to discharge their obligation on pain of fine or imprisonment, the employees' were in the same boat.

When it was announced that the slaughtermen had made satisfactory arrangements with regard to the payment of their fines, Justice Cooper said that the Department had taken the right course in bringing the matter before the Court. The judgment he had given had been a general one, which, in his opinion, would establish the fact that the Arbitration Act was effective, and that penal clauses could be applied to all parties who disobeyed an order of the Arbitration Court. It was well that the public should understand that all classes of persons who came within the scope of the Act, and who committed breaches, were liable if they did not comply with the orders of the Court, to be attached in the Supreme Court.

"It is well," said his Honor, "that this should be generally known both by workers and employers." The machinery in the Act was effective for the purpose of enforcing due compliance with its provisions. He was very glad that the matter had been settled, because it would have been unpleasant to have committed that body of men to prison.

Unfortunately in the meantime instead of leaving the strikers alone, the Directors of the various Companies affected, dealt direct with their delegates who got practically everything they wanted. The strike ended after a duration of three weeks, and the strikers are jubilant with their success. The higher wages secured will enable them to pay their fines in a very short time. There must have been very strong motives on the part of the firms to give in under these circumstances, otherwise it is a very great blunder, the consequences of which may become very serious for the whole system of Conciliation and Arbitration.

This is the first test case of the value of the system which was established on the desire of the Labor Party, and their own members were the first to defy its authority.

To show how divided the opinion in the labor camp is I give here a report of a discussion which took place at the last meeting of the Canterbury Trades and Labor Council:

> "A motion was moved expressing sympathy with "the strikers in their efforts to secure improved wages "and conditions, and an amendment was made to this, "expressing regret that the men should have taken a "course rendered illegal by the legislation of the Colony. "There was some discussion in regard to the proposals, "and it was evident that the opinion on the Council was "divided. Most of the members expressed sympathy "with the demands of the strikers, but there were some "who strongly disapproved of the defiance of the law "by the slaughtermen, and wished the Council, as the "mouthpiece of organised labor in the district, to dis-"avow any sympathy with the action taken by the "slaughtermen. Finally the meeting passed on to the "next business without having arrived at any decision "in regard to the strike. The reason for this strange "course, a reporter was informed, was summed up by "'the mover of the final motion. 'Our Tory friends "'declare that we must express an opinion,' he said; "'our Liberal friends state that we must express an "'opinion; our friends, the employers, are of the same "'opinion. Well, I move that the meeting pass on to "'the next business.'"

We are now looking out for the next strike, wondering what will happen then. The success of the slaughtermen is certainly encouraging to others. That the slaughterhouses paid fair wages cannot be doubted, as it transpired during the discussion that an expert slaughterman could earn anything between $30 to $40 in a week of 45 hours. I must state here that no disorders have taken place, the men on strike behaved very orderly indeed.

At this very moment news reaches me that notwithstanding that the men received all they wished for a revival of the strike may be expected any day. Probably encouraged by their success the men put forward new demands, which are entirely outside the agreement fixed up only a few days ago. A meeting was held, and on taking the votes an even number were for and against the proposal to strike again. To-day another meeting is to be held, which will probably lead to the renewal of the strike. If so, the Companies have to blame themselves; their lamentable weakness is the cause of this new trouble. There is a persistent rumour that the Auckland Tramway employees are contemplating a general strike. The bad example set by the slaughtermen is apparently demoralizing others.

The Christchurch Exhibition is drawing to a close. The closing date has been definitely fixed, the 15th April. The total attendance will be pretty near two million, a record south of the line. The Government expects that the total deficiency will not be more than $100,000, a mere bagatelle considering the advantages derived. If nothing more, it was a cheap advertisement, the results of which cannot easily be brought under figures. Cosmopolitan.

The Schultz Bros. Co., Limited, Brantford, Ont., are installing a sand-lime brick plant of 20,000 capacity.

WORKMEN'S MISAPPREHENSION OF COSTS AND PROFITS.

A potent reason for discontent among manufacturers' employees is their lack of comprehension of the costs of production and their consequent exaggeration of employers' profits. The average workman is not in position to have accurate knowledge of the expense of a manufacturing business, beyond the two items of labor and materials, and even in these basic elements of cost he does not always go far enough in his calculations. Add to this ignorance the impressions of selling prices which the men receive from catalogues and price-lists, and the result is a not unnatural misunderstanding of conditions, which may end in discontent and its troublesome accompaniments. In this connection should be mentioned the workman's failure to see the importance of substantial, even large, profits in flush times, that there may be sufficient resources to tide over periods of dull business while keeping works in operation and men employed, constituting a factor of the future as important to the employee as to his employer.

Manufacturers have discussed methods of remedying this condition. The solution resolves itself into the education of the employee, and this would mean taking him into the confidence of the employer, though not necessarily to the fullest extent. He could at least be given a few rudimentary facts. As the matter stands to-day, a workman may argue that while his labor on a piece of work is, say, 50 cents, and the material is worth no more than 40 cents, yet the manufacturer gets $2.50 for the piece, thus making an exorbitant profit. He therefore believes he should get something more of that profit. He argues that his wages are inadequate as compared with the earnings of the owners of the business.

Fail to Appreciate General Expenses.

If his deductions were correct no one could dispute that he might be given higher wages without prejudice to the rights of the capital which employs him. But his deductions are grievously wrong. He does not consider, because he knows nothing about it, the all important general expense, the overhead cost, which eats into profits oftentimes faster than do material and labor. A general expense of 100 per cent. as compared to cost of labor is common enough, and there are lines in which 200 and even 300 per cent. is none too much to reckon into cost before profit can be said to begin. It would be difficult to find an employee of such a manufacturer who could be made to believe this unless he were confronted with unimpeachable figures. There are plenty of manufacturers who do not themselves comprehend the full import of their costs above those of labor and materials. Selling expenses are usually heavy. Costs of power, rent, insurance, salaries, maintenance of plant and equipment, telephone, postage, stationery, water, the hundreds of incidental expenses of shop and office, the charge-off for depreciation—all go to make up an astonishing total. Those who really know what these expenses mean can comprehend what ratio they bear to labor and material. It is small wonder that such figures shrink into insignificance as they are bandied about in shop discussions.

Have Not All the Facts.

Employees like to figure costs of products of their own shops. They can get at the figures for labor and materials pretty accurately, and they learn what the product brings in the market. They subtract the one figure from the other and term the balance profits. A skilled mechanic of more than ordinary intelligence made the statement recently: "That machine cost not a cent over $225 and it sells for $500," and he would not accept the statement, which is absolutely true, that the great gap between the two figures was largely filled by the great item of general expense, and the profit was rather a small one considering the present market.

Prepare for Depressions.

There is the other side to this question of profits which the employee should, but does not, bear in mind. The manufacturer should make large profits when his market is in condition to bear them. He must not calculate his net earnings on the totals of a few years of good times, but he must take into account an average of years, including those which constitute periods of loss. Most manufacturers have seen in the past their surplus accounts wiped out in trying to keep their works running. These accounts have stood between important houses and failure. Many manufacturers to-day are accumulating surplus accounts; not all of their earnings, it is to be hoped, are going into dividends and improvements. A period of prosperity such as this gives to the business house that takes proper advantage of the opportunity the strength, the general stability which will enable it to withstand the strain when more money is going out than is coming in. When dull times arrive the workman's position is a precarious one. He is dependent upon the ability of his employer to keep the works running. Most manufacturers endeavor to maintain their working forces intact during times of depression. Men must be laid off, of course, but the effort is to keep together as many as possible of the best, most trustworthy men. There are hard business reasons for this, as well as the kindly spirited desire to give workmen a chance to earn their living. But neither reason can avail unless there are funds with which to pay the bills, and now is the time when those funds are gathered together, or credits are placed where they can command the money when it shall be needed.

Educate the Workmen.

These are some of the conditions of business which the workman is not able to take into account, because he does not fully realize them. Probably he has never been taught. There are some men who could not be taught, because they never would believe. But there is always a goodly leaven of intelligent, fair-minded, even broad-minded, men, in every establishment, who can be educated. Perhaps well prepared literature would have its effect. Perhaps shop talks, illustrated by actual costs as they exist in that shop, would do the most good. Perhaps seeds could be sown through apprentices, during their terms of training, so that when they become journeymen they could help along the work of education. There is apt to be a cynicism among employers that their men would not see things as they are, even were they given fullest opportunity to learn the facts; that prejudice against the employer because he has more of this world's goods is what counts, rather than ignorance of conditions. There must always be some envy of another's better fortunes, but we believe those of which this is true are in the minority in the workshops and mills, especially where better classes of workmen are employed.—Iron Age.

The Canadian Westinghouse Company, of Hamilton, will enlarge their plant during the coming summer. The great increase in the production of railway cars and locomotives of recent years has made their air-brake department altogether inadequate to meet the demand. Hence, this department will be enlarged by the erection of a two-storey addition at a cost of $50,000.

AMONG THE INDUSTRIES

A large addition is being built to the Guelph Carpet Mills.

The Standard Fitting and Valve Company will build a $100,000 factory in Guelph this year.

The Mississippi Iron Works, of Almonte, have been sold to Messrs. Bowland, Williams and Glover.

Brandon has completed arrangements with a biscuit manufacturing company for the establishment of a factory there.

The Frontenac Gas Company, of Quebec city, will install a new plant this summer at a cost of one million dollars.

The veneer factory of Mulhall & Co., of Sundridge, Ont., was totally destroyed by fire on April 10th. The loss is $16,000.

The Guelph Axle Works will add a new building to its factory during the present year. The plans call for a building 46 by 76 feet.

W. E. Shantz and H. Quelsdorf will build a furniture factory in Berlin. The building will be 50 by 80 feet and two storeys high.

A new smelter is now proposed for the St. Mary's River, near Sault Ste. Marie. It will handle copper ores from Canadian mines in Northern Ontario.

Stratford has a new industry. Merritt & Co. have established a stave factory, which is doing a rushing business. They have erected a substantial factory building.

Work on the plant of the National Rolling Mills, Limited, at Sydney, N.S., will begin at once. This company has been organized by C. V. Wetmore and F. A. Crowell.

The Anchor Wire Fence Co., of Stratford, are planning to build a new factory this summer. The proposed building is two storeys high and 100 by 50 feet. It will be built of concrete.

A company of London capitalists are negotiating with the city of Woodstock for a loan of $15,000 towards the establishment of a canning factory. The proposition meets with general favor.

Shaw & Mason, Limited, Sydney, N.S., has been organized with a capital of $100,000 to manufacture brass and cast-iron fittings. The company will be the only one of its kind in Nova Scotia.

Plans for a brick factory building, 50 by 150 feet, two storeys, have been approved by the Canadian Brass Manufacturing Company of Guelph. It is expecte dthat building operations will be proceeded with at an early date.

A company to manufacture cement blocks for building purposes has been organized in Victoria, B.C. This building material has been extensively used in Vancouver, and the new industry has every promise of success.

It is reported from St. Catharines that the Welland Vale Manufacturing Co. will greatly increase its plant in that city. An increased property has been acquired, and the factories now running in New Bedford and Montreal will be concentrated in St Catharines.

Perine's Mills, Doon, will be turned into the Doon Twine and Cordage Company, Ltd., with a capital of $250,000. The company has been manufacturing cordage for many years, and the increase in the past few years has necessitated the taking in of more capital, to enlarge the plant.

The Granby Consolidated Smelting Co. will enlarge its plant and output during the present summer.

The Restigouche Woodworking Company's factory, of Dalhousie, N.B., was completely destroyed by fire last month. The boilers and engines were saved, but a large amount of manufactured lumber was consumed. The loss is estimated at $80,000, with insurance of $40,000.

A company has been organized under the name of the "Industrial Development Company of Canada, Limited," with a capital of $750,000. Its headquarters are at Hull, Quebec. The new company proposes to secure timber limits, mills, distillation plants, etc., and to do a general lumbering and manufacturing business.

The Hamilton Steel and Iron Co., Ltd., have begun making railroad spikes from basic steel bars. The new department is now in full running order. The great demand for these spikes, which has filled up the older plants with orders far ahead, will make the addition of this department particularly welcome to the users of these supplies.

A plant for the extraction of by-products from wood will be established in Victoria, B.C. R. N. Calkins, a mechanical engineer, has been carrying on investigations for some time, and he has met with sufficient encouragement to cause him to organize a company for the extraction of tar, wood spirits, turpentine, and other products from fir wood.

The famous engine, which was the especial element of interest in the Ogilvie Flour Mills, Winnipeg, has been discarded in favor of electric power. For years the engine was one of the chief sights to which visitors were taken in the Western city. The engine has been replaced by a 1,200 h.p. Westinghouse motor, directly connected to the shaft in the main mill, and a number of smaller motors of 150 h.p. in the outlying departments.

The Canadian Fairbanks Co., Limited, with branches in Toronto, Winnipeg and Vancouver, have obtained the Canadian selling agency for the new alundum grinding wheels, made by the Norton Grinding Wheel Co. Alundum is the next hardest abrasive to the diamond, and, being brittle, fractures easily, thereby assuring a sharp cutting wheel at all times. It is manufactured by a patented electrical process at Niagara Falls, and extreme hardness and sharpness, with its remarkable uniformity, are the general characteristics.

The Allan Line have placed an order with a Clyde firm, Alexander Stevenson & Company, for the construction of an additional vessel, of 10,000 tons, which will be utilized on the Montreal-Glasgow service. Shortly after the opening of navigation this year the Allan's will have two new steamers in addition to the fleet they operated last year to Montreal. The Corsican, a 11,000 ton steamer, and the Grampian, a 10,000 ton steamer. The Corsican will be placed on the Liverpool service, and the Grampian on the Glasgow route. The steamer just ordered will be of the Corsican type; a twin screw, sixteen knot boat. Although this vessel will be built mainly for the carrying of freight, she will have a large passenger accommodation, and will be able to take her share of the large number of immigrants whom it is expected will come from the shores of Auld Scotia to Canada during the next few years. She will be ready for service by the first of May, 1908.

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the name of enquirers, apply by number to the Secretary, of Toronto.

288 **Agency for Canadian Goods.**—A **Newfoundland** dealer wishes to secure local agencies to sell Canadian goods.

289 **Agency for Canadian Goods.**—A general dealer would like to secure an agency to sell Canadian goods in **Newfoundland.**

290 **Agency Wanted.**—A manufacturers' agent wants to be put in communication with Canadian exporters wanting the services of an agent.

291 **Agents.**—A **North of England** firm is prepared to act as agents for Canadian exporters of feldspar, who may be seeking to do business with English potteries.

292 **Agencies**—A **Bristolian** is in a good position to accept Canadian agencies for bacon, butter, apples, evaporated apples, ground oats and oatmeal.

293 **Agent.**—A gentleman in **Bristol** could act as agent for any large Canadian firm exporting butter, cheese, and provisions generally.

294 **Agent.**—A **Canadian** is open to represent some Canadian firms in Great Britain.

295 **Agent.**—A well-known reliable English commission agent desires to be put in communication with a few good Canadian houses who wish to introduce their products in **England.** Good connections in **West and Midlands.** Preference for provisions and hardware. Best of references.

296 **Bacon, Hams,** etc.—A **Glasgow** firm of produce importers having a large connection for the sale of bacon, hams, butter and eggs desires to extend relations with Canadian exporters, and asks to be referred to parties not already represented in Great Britain.

297 **Butchers' hickory skewers.**—A **Lancashire** firm at present buying in the United States asks for prices of butchers' hickory skewers packed in barrels c.i.f. Manchester, sizes 4½ in. x 5-32 in., 5½ in. x 5-32 in., 6 in x ¼ in.

298 **Butchers' maple blocks.**—A **Lancashire** firm asks for prices c.i.f. Manchester of butchers' maple blocks, reversible, without legs, sizes 4 ft. x 2 ft. x 9 in., 5 ft. x 2 ft. x 9 in., and 6 ft. x 2 ft. 3 in. x 9 in.

299 **Calcium Carbide.**—A **London** firm in a position to dispose of large quantities of carbide of calcium packed in hundredweight drums wishes to hear from Canadian firms able to export.

300 **Canned lobsters, salmon, fruits, etc.—Antwerp, Belgium** commission house is prepared to sell on commission or purchase large quantities of canned salmon, lobster, fruits, vegetables, and meats. Also corn flour and rolled oats. Invites correspondence from Canadian shippers of these goods. References.

301 **Canoes.**—An enquiry has been received from **Paris, France,** for Canadian canoes. Good order in sight if prices right. Goods c.i.f. Havre or f.o.b. Montreal.

302 **Casein.**—A **London** firm would like to hear from Canadian manufacturers of casein open to do business in the United Kingdom.

303 **Chairs and Rockers.**—A wholesale merchant wishes the names of Canadian manufacturers of chairs and rockers, and to receive catalogues from them, also price list.

304 **Church Organs.**—A **South African** indent merchant desires to get into touch with a Canadian manufacturer of church organs who is desirous of opening up trade in South Africa.

305 **Cobalt, nickel and arsenic ores.**—A **Belgian** firm wants to come in touch with Canadian mining companies for the supply of cobalt, nickel, and arsenic ores.

306 **Corn Starch, zinc blende.—Antwerp, Belgium,** Commission house is open to buy quantities of corn starch in pearls, powder or lumps direct from Canadian producers. Also desires to hear from Canadian exporters of zinc blende with a view of placing large orders in Canada. Further particulars at this office.

307 **Felspar.**—A **Liverpool** firm dealing in all classes of minerals, such as are used by potteries, makes inquiry respecting supplies of felspar from Canada, either in lumps or in fine powder.

308 **Furniture.**—A **London** firm of furniture dealers asks to be placed in communication with Canadian manufacturers of office furniture and cabinets.

309 **Ground Barytes.**—A **London** firm asks prices c.i.f. of ground barytes from Canadian shippers.

310 **Hammers, brushes, and brooms.**—A **Manchester** firm asks for prices of hammers, brushes and brooms c.i.f. from Canadian manufacturers.

311 **Handles, wooden.—Jumet, Belgium,** hardware wholesaler is open to place orders in Canada for wooden handles, hammer, axe, garden implement, etc.

312 **Handmills, Small Turbines, etc.**—Former resident of Canada, now living in **British Guiana,** who is interested in rubber properties, etc. (Canadian makers) in that country is open to purchase some small hand mills or small turbines for grinding dry plaintains with flour. Also coffee pulping and curing machines and rubber washing apparatus. Expects commission for placing business. References.

313 **Hickory handles.**—A **South Yorkshire** firm are purchasers of hickory handles of high class quality to be used for colliery pick handles, and desire to get in touch with Canadian firms who can ship them reliable stuff.

314 **Lead bends, traps, and syphons.**—Old established well-known firm of wholesale dealers in plumbers supplies of **Leeds, England,** is prepared to place orders direct with Canadian manufacturers for hydraulic drawn lead bends, traps, and syphons for shipment to England.

315 **Linseed Cake and Cotton Cake.**—A London firm desires the addresses of Canadian manufacturers of linseed cake and cotton cake seeking export trade.

316 **Oatmeal, Rolled Oats, etc.**—A **Bristol** firm would be glad to hear from Canadian exporters of oatmeal, rolled oats, groats, and so on.

317 **Papers.**—A paper agent in **Glasgow** desires to obtain the agency for Scotland, the North of England, and Ireland, for Canadian paper mills shipping news, printing, manillas, box boards, brown wrappings or sealings. Commission 2 to 2½ per cent. according to value of paper on all transacted and paid for. Terms usually one month, payment inside two, but these subject to arrangement.

318 **Pine Deals and Sidings.**—A **Manchester** firm asks for prices of pine-deals and pine sidings from Canadian shippers of same.

320 **Rags.**—A **London and Batley** (Yorks.) house who deal extensively in foreign rags are anxious to get in touch with Canadian shippers of new woollen clippings, and also old woollen rags. They are also large buyers of new cotton and linen rags for paper-making purposes.

321 **Roll Top Desks and Bookcases.**—A **Manchester** firm wishes to obtain catalogues and prices c.i.f. of roll top desks and book-cases from Canadian manufacturers.

322 **Scrap Copper and Brass.**—A **Manchester** firm will welcome correspondence from Canadian shippers of scrap copper and brass.

323 **Steel Filing Cabinets.**—A **South African** general agent doing business with the leading firms here desires to represent a Canadian manufacturer exporting steel filing cabinets. Quotations required.

324 **Talc.—Berlin, Germany,** firm of dealers in mine products on a large scale are prepared to buy considerable quantities of talc in Canada. Request samples and lowest quotations from Canadian miners.

325 **Vitrified Iron Conduits, Stoneware, etc.**—An **Ontario** firm is in the market to purchase quantities of vitrified iron tiling, piping, and conduits, stoneware faucets, smooth and streated, stoneware boxes, and sulphur.

326 **Underwear, Socks, and Stockings.—Alexandria, Egypt,** merchant asks quotations, catalogues, etc., for socks, stockings and knitted underwear from Canadian houses. Will open good account if goods right.

327 **Wash and Paste Boards.**—A **Manchester** firm asks for prices of washboards and pasteboards from Canadian manufacturers

328 **Wheat.**—A **Manchester** firm desires prices of Manitoba northern wheat c.i.f. from Canadian exporters.

329 **Wood Pulp.**—A **Belgium** firm having a close connection with the leading consumers in France and Belgium is prepared to take up the sale of Canadian wood pulp, and would be glad to have the agency of a first-class manufacturer, the quality of whose product will suit the markets mentioned.

330 **Wood and Iron Goods, Sanitary Materials, etc.—Burnley, England,** manufacturer's agent desires to secure catalogues from Canadian manufacturers of wood and iron goods for the engineering, sanitary, and hardware trades.

331 **Woollen and Cotton Rags.**—An importer of all descriptions of woollen and cotton rags (new or old) who extensively imports from the continent is anxious to make arrangements with Canadian exporters to meet a large demand.

332 **Wrapping Paper, Horse Shoes, Saddler's Hardware.—St. John's, Newfoundland,** commission house is open to sell on commission large quantities of the above articles. References.

COATING IRON WITH TIN.

A Chicago company has perfected a process for coating iron, steel, copper and other metal articles with tin, by which it is claimed a coat of unusual evenness and brightness is obtained. The method employed involves the use of electricity, and deposits the metal with such uniformity that the contour of articles of irregular shape is found not to be altered perceptibly by it, and the filling of small crevices, such as occur in fine screw threads and other work, is consequently avoided.

The efficiency of the new process is perhaps best illustrated in the treatment of perforated sheets, as it is stated that, when applied to sheets having 400 to 500 perforations to the square inch, all exposed surfaces are evenly covered, without clogging the interstices. Gray iron castings also, which by the ordinary processes have not heretofore been satisfactorily coated, are claimed to be successfully and economically covered by this new method.

The same company, as a result of protracted experiments, has developed what is represented to be a gas-and-oxide-free zinc coating of an amorphous noncrystalline nature that has all the desired smoothness and finish, even when deposited in coatings ⅛-inch thick. This result is attributed to a new process whereby the inherent tendency of zinc to deposit in crystalline form, causing the formation of nodules or "trees," is overcome—"Industrial World."

RESULTS

Are what we are all after. Advertisers use newspaper space in order to sell their goods. If the results do not come the advertising is stopped—If a profit is made they increase their space. This explains why **The News** is in a position to publish this statement :

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Over the same months of last year. Examine it.

	1905	1906	Increase
Oct.	323,395 Lines	382,864 Lines	59,469
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Dec.	390,284 "	454,167 "	63,883
	1906	1907	
Jan.	288,502 "	366,592 "	78,090
Feb.	284,894 "	375,109 "	90,215
March	371,875 "	439,573 "	67,698
	2,016,653 "	2,454,418 "	437,765

An Increase of 437,705 Lines or 21.7 per cent.

The News brings returns to advertisers. Its flat rate of 4 cents per line enables the Advertiser to use just the amount of money necessary to put his business where he wants it. There is no balance of useless contract to be used up.

Then, too, in its 40,200 circulation there is no waste. **News** readers have the money to buy, if the goods advertised offer an attraction.

If you have an idea that advertising would benefit your business, try it out in **The News.**

Send your copy—the rest will be done for you.

The News, Toronto

THERE'S A NEW STYLE
DUNLOP
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Made by the Doughty process—a valuable patent controlled exclusively by the Dunlop Company. A Doughty-made Dunlop tire is stronger, more resilient, and has a durable slipless tread. Its distinguishing mark is the words "Dunlop Tires" in raised letters on the wearing surface.

All the dealers have them.
They cost no more.

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Written by Experts Illustrated by Artists
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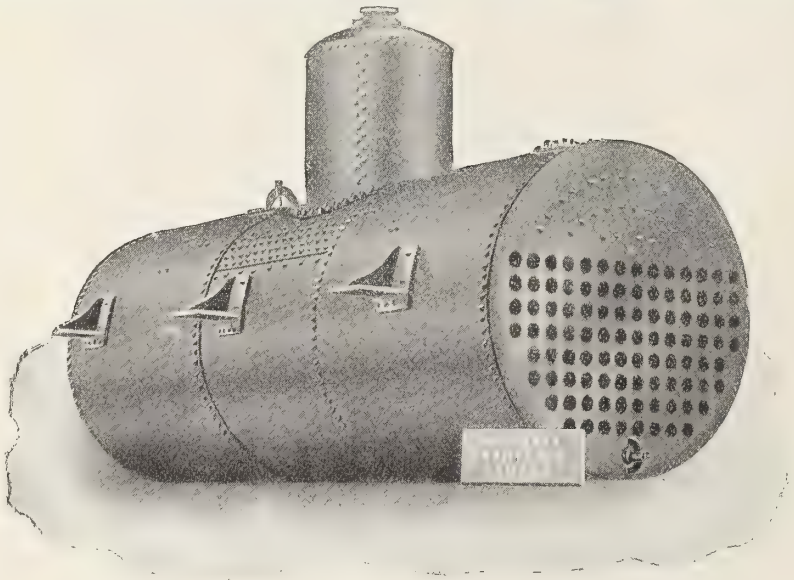
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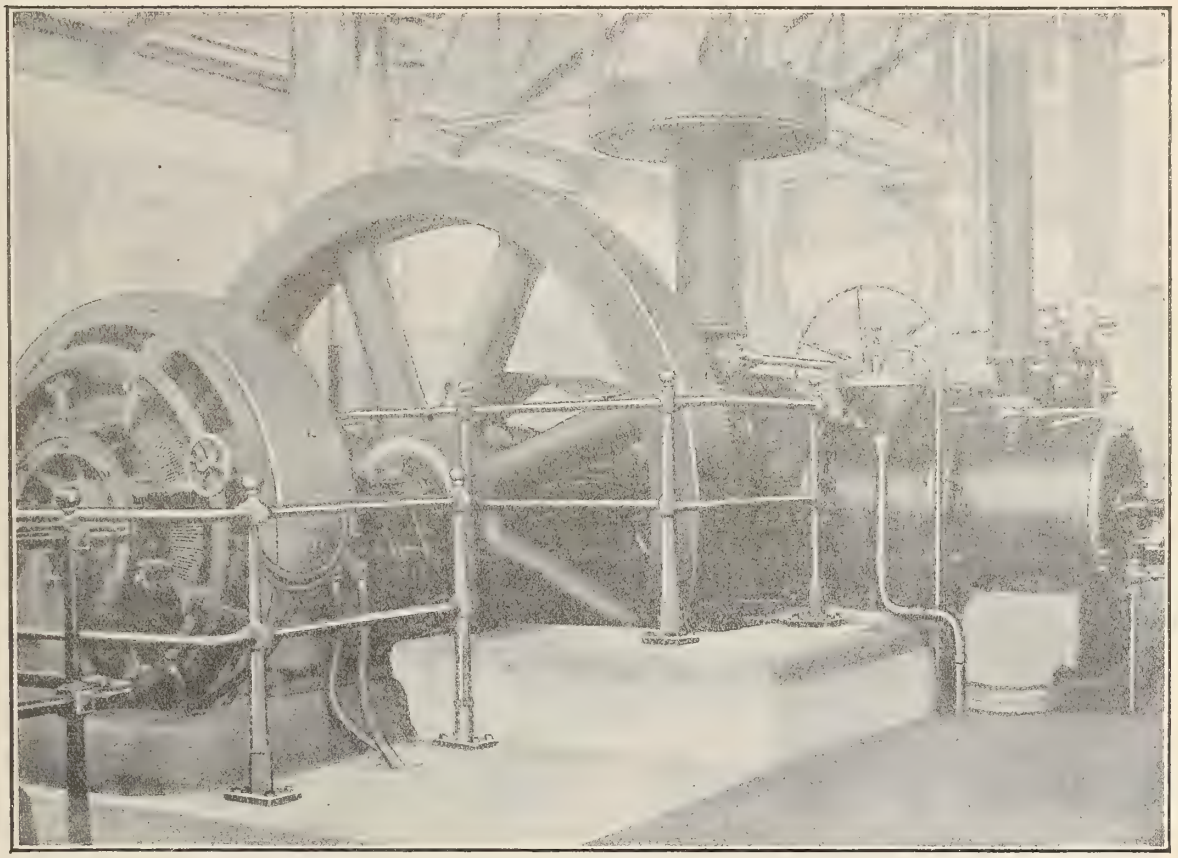
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"PREMIER" GAS ENGINES

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100 HORSE-POWER "PREMIER" GAS ENGINE

Simple, Reliable, Quiet, Steady, Economical. Small Repairs. Used with C. G. E. Electric Generators and Motors, form an ideal plant.

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"Canadian Club" Whisky

Fully Ripened in Wood. Age Guaranteed by Government.

QUALITY UNEXCELLED

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SMART BAG CO.

LIMITED

BAGS in JUTE, BURLAP and COTTON
BAG PRINTING a specialty
JUTE CLOTH, HESSIANS, BURLAPS and PADDINGS
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It is said that Trade follows the Flag but Trade is more likely to follow where Good Stocks are kept. Ample Stocks and Quick Shipments
THE CANADA PAINT COMPANY LIMITED
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METAL ROOFING

Protects from rain, snow and ice—from fire and lightning. Many Canadian Manufacturers have cured their roofing troubles by using

"ACORN QUALITY" CORRUGATED SHEETS
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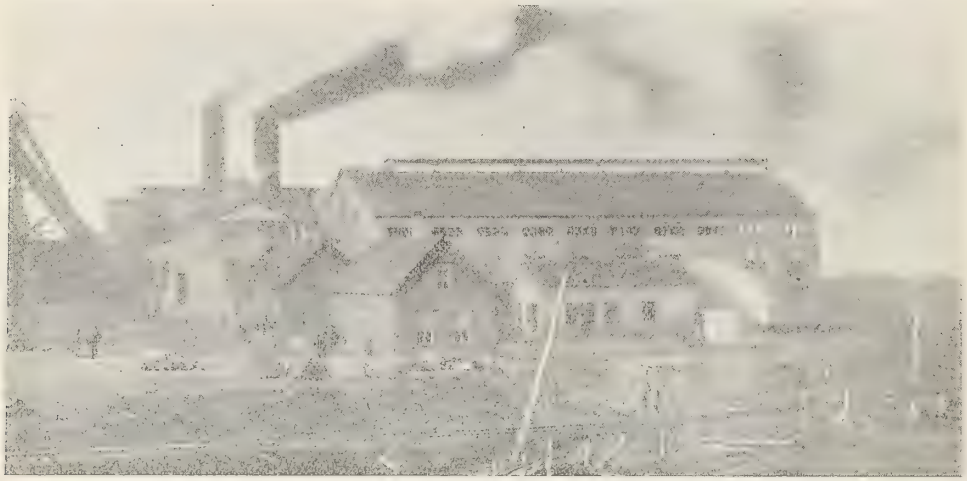
Let us know the size and pitch of your roof, and we'll be glad to give estimates and suggestions.

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Walls, Roofs and Floors by Expanded Metal System.

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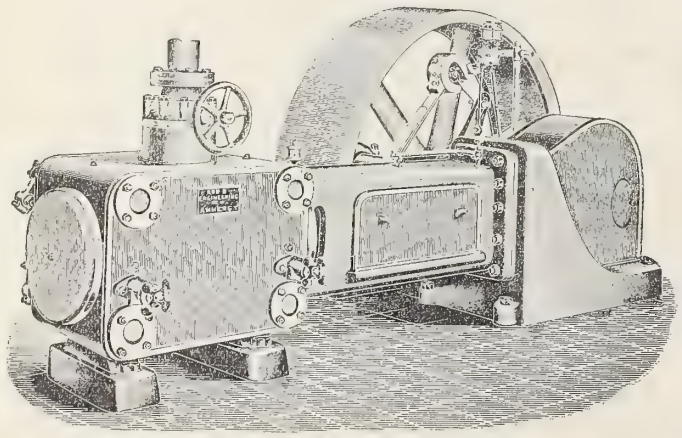
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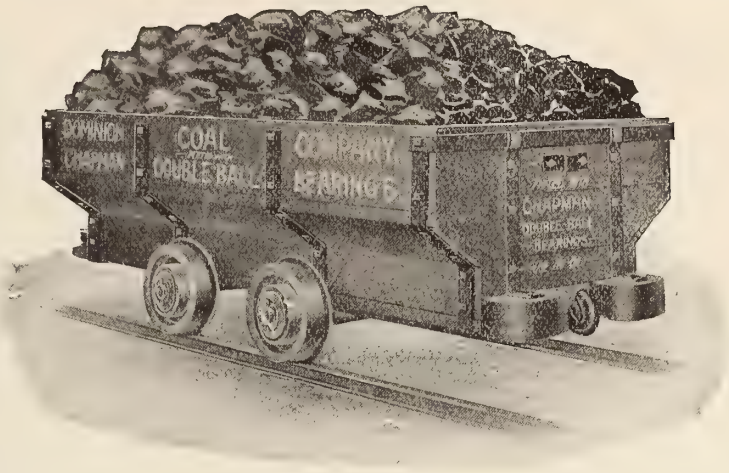
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50 % Power to operate.

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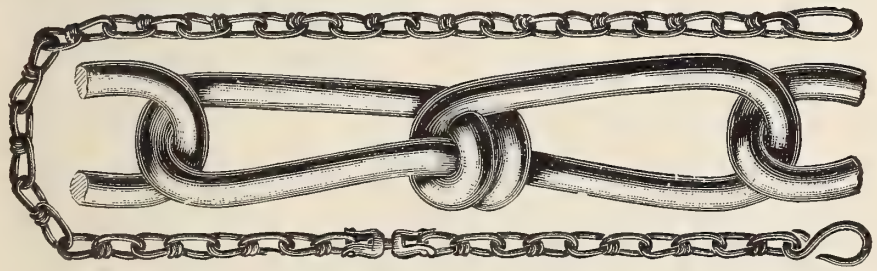
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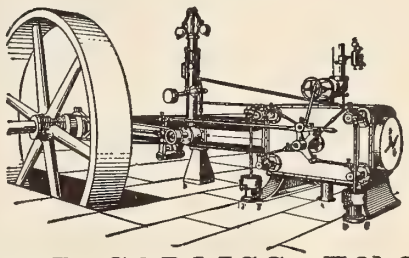
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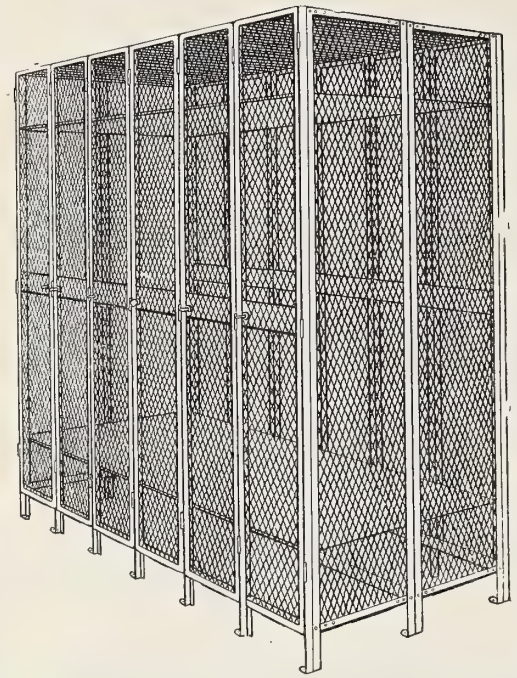


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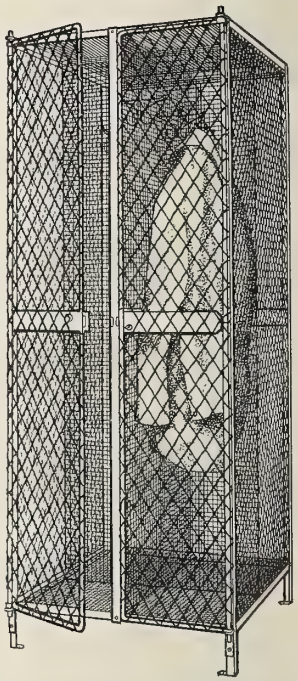


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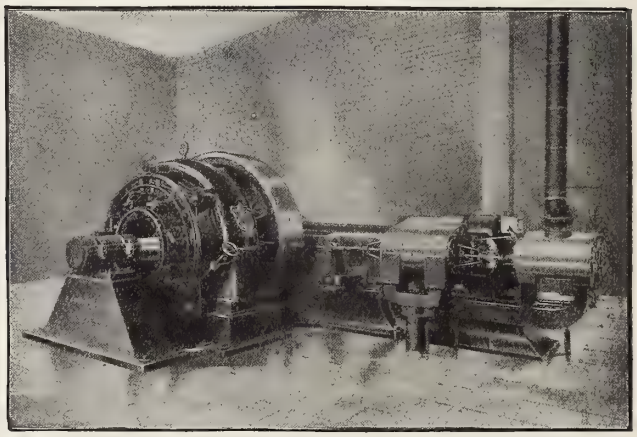
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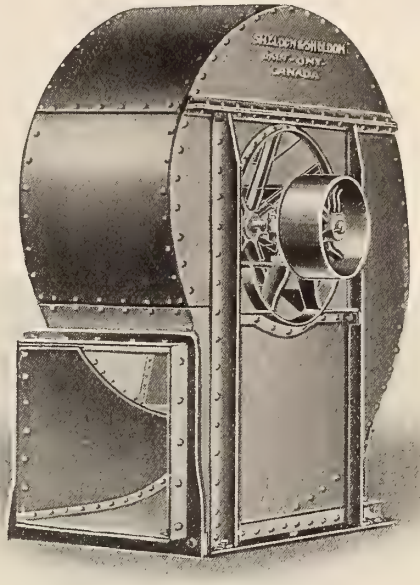
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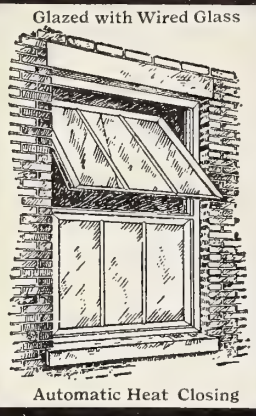
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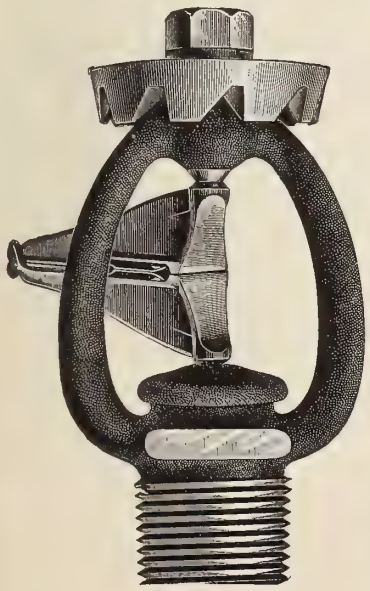
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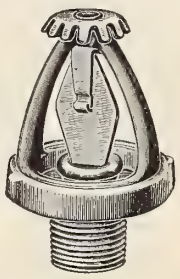
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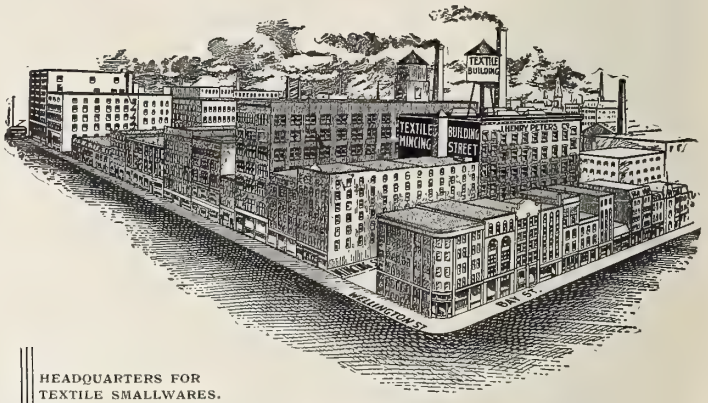
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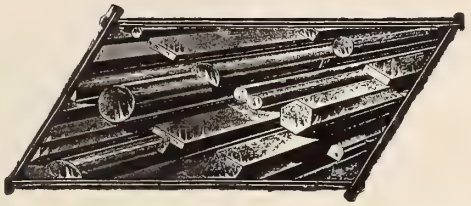
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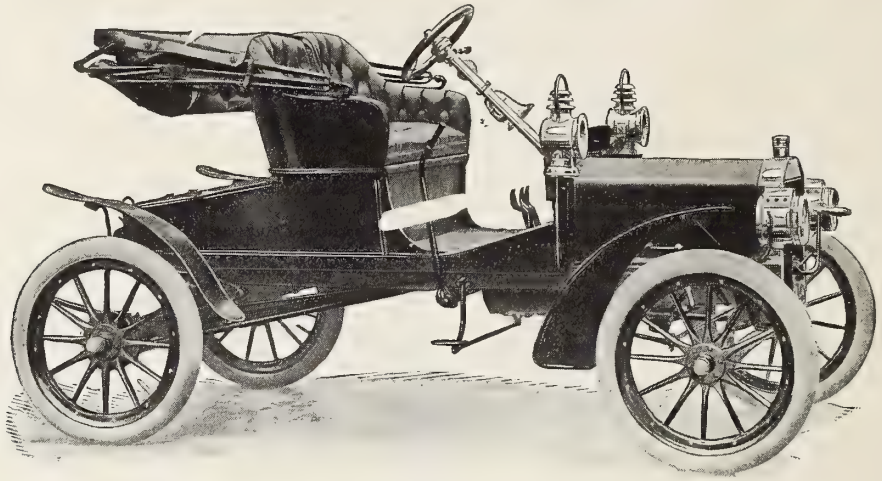
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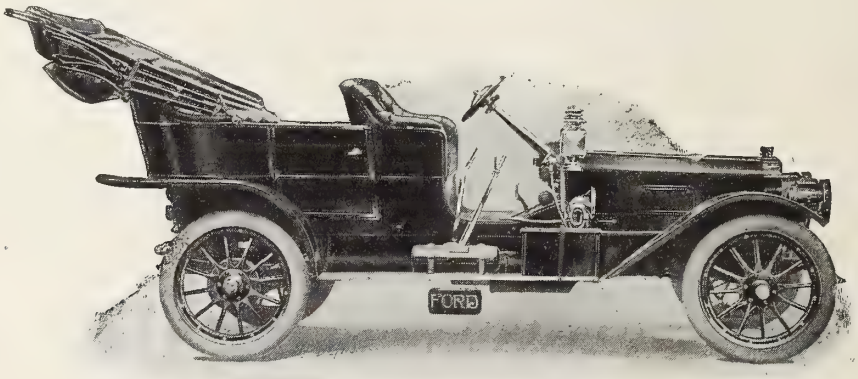
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EXECUTIVE COUNCIL

EXECUTIVE COUNCIL.

APRIL MEETING.

The regular monthly meeting of the Executive Council was held in the Council Chamber of the Board of Trade Building, Toronto, on Thursday, April 18th, at 2 p.m.

The President, Mr. H. Cockshutt, occupied the chair. Other members present were: Messrs. P. H. Burton, Toronto; Geo. Booth, Toronto; J. W. Cowan, Toronto; John Dick, Toronto; L. V. Dusseau, Toronto; J. F. Ellis, Toronto; H. D. Fleury, Aurora; J. Firstbrook, Toronto; Thos. Findley, Toronto; D. J. Fraser, St. Johns; W. M. Gartshore, London; J. Goldie, Guelph; R. S. Gourlay, Toronto; W. P. Gundy, Toronto; S. R. Hart, Toronto; S. Harris, Toronto; R. McLaughlin, Oshawa; Hugh C. MacLean, Winnipeg; J. P. Murray, Toronto; W. C. Phillips, Toronto; Hon. J. D. Rolland, Montreal; A. S. Rogers, Toronto; Jas. Sinclair, Toronto; J. T. Sheridan, Toronto; Arnold W. Thomas, Toronto; R. L. Torrance, Guelph; C. I. I. Wilson, Ingersoll.

Minutes of the March meeting as published in "Industrial Canada" were taken as read.

Communications.

(a) Letters of regret were received from the following members unable to be present: Messrs. Robt. Munro, J. S. N. Dougall, J. J. McGill, Wm. Smaill, S. W. Ewing, J. Davidson, Montreal; Alex. Saunders, Goderich; T. F. Matthews, Peterboro'; Carl Riordon, Merritton; Louis Simpson, Valleyfield; John Smallman, London; C. H. Waterous, Brantford; R. Thomson, Paris.

(b) From the Secretary of the Toronto Board of Trade asking the Association to endorse its recommendations to the Ontario and Dominion Governments in the matter of civil service reform. Referred to the Parliamentary Committee.

(c) From the President of the Victorian Chamber of Commerce, Melbourne, Australia, inviting the co-operation of the Association in making a success of the first Australian Exhibition of Women's Work. Referred to the Commercial Intelligence Committee.

Reports of officers and committees were then presented as follows:—

PRESIDENT.

The President reported that he and the Secretary had, during the previous week, visited the members of the Association in Halifax and St. John. It had originally been his intention to include Quebec in this trip, but owing to the unfortunate death of Dr. Drummond, he had been obliged to cancel this arrangement. Besides addressing the Canadian Club, both in Halifax and St. John, he reported that meetings of the local manufacturers had been called at which the work of the Association had been explained in detail, and a number of questions answered upon points regarding which members present desired enlightenment. He expressed particular appreciation of the kindness which had been shown himself and the Secretary by the members in St. John in arranging a trip around the harbor, and expressed the hope that as a result of his visit to that city a Branch of the Association might be organized there.

SECRETARY.

Touching on the above matters the Secretary stated that the desirability of nationalizing the port of St. John was one of the big questions among business men in the East, and he thought that the Association might very well lend its assistance in bringing about this object.

He mentioned incidentally that the report of the Reception and Membership Committee recommended for acceptance ten applications for membership from New Brunswick and Nova Scotia which might be attributed directly to the decision of the Association to have its officers visit the Eastern Branches.

TREASURER.

The Treasurer, Mr. Geo. Booth, read a statement of the receipts and disbursements for the month of March, showing a balance to the credit of the Association of $19,059.18. Anticipating the report of the Finance Committee, he stated that he thought at least a portion of this might be invested in securities that would bring the Association something better than bank rate of interest. The adoption of the report, seconded by Mr. Phillips, was carried.

FINANCE.

The report of the Finance Committee, presented by Mr. J. F. Ellis, recommended the payment of accounts for the month, amounting in all to $2,921.50.

After referring to the very satisfactory bank balance which the Association had been carrying since the first of the year, the Committee recommended that authority be given them to invest $5,000 with one of the Toronto trust companies at 4 per cent.

The adoption of the report moved by Mr. Ellis, seconded by Lieut.-Col. Gartshore, was carried.

PALIAMENTARY.

The Chairman, Mr. A. S. Rogers, presented the report of the Parliamentary Committee, reading as follows:—

The regular monthly meeting of the Parliamentary Committee was held on April 16th, with an attendance of five, when the following matters were dealt with.

Child Labor.

At the last meeting of the Council your Committee received authority to circularize the Ontario members on the subject of child labor, with a view to making representations before the special committee of the Legislature appointed to investigate this question. Owing to the fact that the report of this Committee was presented to the House only a few days afterwards, the circular was withheld. The report of the Committee appears to be moderate and reasonable in its recommendations, and there is little likelihood of conditions being imposed which would prove a hardship to the manufacturer. The matter will be closely watched, however, as legislation along the lines of the Committee's report will probably be introduced next session.

Stationary Engineers.

It is a pleasure to be able to report that a number of the suggestions made by the Association in the above matter have been adopted. Steam heating plants operating at a

pressure of 20 pounds or under have been exempted from the operation of the Act; certificates have been made effective for life or during good conduct; liberal provision has been made for the granting of certificates to competent men who may now be operating engines of 25 horse-power or over; and the compulsory examination at the end of three years for the holders of interim licenses has been done away with.

As soon as the Bill is finally assented to, your Committee would recommend that a copy be sent to every Ontario member along with a letter calling attention to the salient features of the new law, and pointing out the beneficial influence of the Association in procuring its enactment.

Workmen's Compensation.

In view of the likelihood of some Government Legislation being introduced into the Ontario Legislature next session to amend and consolidate the laws respecting compensation to workmen injured in factories, your Committee proposes to hold a special meeting in the near future at which the matter can be thoroughly discussed. A number of parties known to be well posted on the subject will be invited to attend, and it is hoped that the result of the meeting will be the adoption of some well defined principles calculated to overcome many of the objections to the present law.

Measurement of Water Flow and Rain Fall.

The Association has been requested to support a memorial to the Quebec Government, asking that arrangements be made to record the flow of water in the rivers of that Province in order to facilitate the development of the splendid water powers with which the Province abounds. From a somewhat hasty perusal of the correspondence, your Committee is satisfied that data such as is asked for would prove very helpful to engineers in determining the efficiency of water powers. Where estimates for hydraulic development have to be based on limited data and deductions drawn from observations covering only a brief period of time, they are likely to be erroneous, frequently leading to serious results. In as much as the work could apparently be done at a moderate cost and would in all probability result in the investment of more foreign capital in developing our numerous water powers, the Committee feel that the request is one which might well be complied with. Enquiries will first be made of Quebec members to see if the proposal commends itself to them; if so, the Council will be asked to pass a resolution recommending that Quebec and possibly other Provinces of the Dominion take action along this line. It may be explained that the project has already been endorsed by the Canadian Society of Civil Engineers.

Commercial Travelers' Taxes.

Information has been received that the British Columbia Legislature has abolished the tax on commercial travelers in so far as it relates to the representatives of houses other than those dealing in liquors and tobaccos. Complaint has been made by a cigar manufacturer, a member of the Association, who objects to its being left operative as against his business, and who asks the Association to use its influence in having it repealed. Enquiries will first be made to ascertain the reason for this action on the part of the British Columbia Government.

In moving the adoption of this report Mr. Rogers expressed the opinion that the Association might congratulate itself on having been able to secure such favorable terms in the Stationary Engineers' Bill. He further stated that the thanks of the Association were due Mr. W. K. McNaught for the very able manner in which he had guarded the interests of the Association in all legislation where it was affected.

Mr. Phillips enquired when the tax on commercial travelers in British Columbia had been repealed, stating that he had been called upon to pay this tax quite recently and would like to make application for a rebate if it were in order. The Secretary promised to obtain information for Mr. Phillips on this point at as early a date as possible.

The Honorable Mr. Rolland referred to that paragraph of the Committee's report having reference to the collection of data regarding the flow of water in the rivers of the Province of Quebec and stated that he would be very glad to assist in the movement by bringing the Association's representations to the personal attention of the Minister of Public Works in Quebec.

The adoption of the report, moved by Mr. Rogers, seconded by Mr. Gourlay, was then carried.

COMMERCIAL INTELLIGENCE.

The report of the Commercial Intelligence Committee was read by Mr. J. P. Murray as follows:—

Your Commercial Intelligence Committee begs to report the holding of its regular monthly meeting when the foliowing matters were dealt with:—

Exhibitions.

Communications received from various quarters with information regarding international exhibtions to be held in foreign countries suggested the advisability of having a permanent committee appointed by the Association to handle matters of this kind. It was decided that a recommendation should go forward to the next Annual Meeting of the Association favoring the appointment of such a Committee for the purpose of collecting and disseminating information regarding international exhibitions all over the world, and assisting members with the transportation and arrangement of exhibits.

Foreign Agents of Canadian Houses.

In response to the circular issued on March 5th last inviting the members of the Association to send in the names of their foreign agents in order that classified lists might be prepared and sent to Canadian commercial agents abroad, so as to assist them in directing trade enquiries, ninety-three replies were received. While your Committee realize that this response is by no means as large as it might have been they feel that those who have replied should benefit by their action, and the Secretary has therefore been instructed to furnish commercial agents abroad with lists of the agents doing business in their respective territories.

Australian Preference.

Since the last meeting of the Council a deputation from the Committee waited upon Sir Richard Cartwright emphasizing the desire of the Association that in any negotiations entered into between Canada and Australia for a mutual preferential tariff, the needs of all Canadian industries should be adequately taken care of. Your Committee is glad to report that the Government is disposed to do everything in its power to make the most liberal terms possible on behalf of Canadian shippers, though the negotiations will be rendered somewhat difficult by the balance of trade against Australia, as well as by the strong protectionist sentiment among the labor party there. Interested shippers have been duly advised to forward details of their cases to the department at once in order that there may be no chance of their being over-looked when the matter is under discussion.

Standardization of Sizes for Catalogues.

Considerable progress has been made in gathering information on the above subject. The idea seems to have strongly commended itself to most of those of whom enquiry has been made. Your Committee hopes to bring in a recommendation at the next meeting.

Statistics of Production.

Investigations have been carried on by your Committee for some time past with a view to ascertaining what provision was made by the Governments of other countries as well as by guilds and commercial organizations for compiling annual statistics for production. From the information thus far received it is apparent that a considerable advance in this direction might be made in Canada. Further enquiries will be sent out before any decision is arrived at.

The adoption of the report, moved by Mr. Murray, seconded by Mr. Torrance, was carried.

RAILWAY AND TRANSPORTATION.

The Manager of the Transportation Department presented the Report of the Railway and Transportation Committee as follows.—

The regular monthly meeting of the Railway and Transportation Committee was held in the Association offices on Monday, April 15th.

Re-adjustment of Rates.

The Department reported that the resolution adopted at the last meeting and approved of by the Executive Council in regard to the re-adjustment of rates was communicated to the Board of Railway Commissioners, and a formal acknowledgement has been received.

Express Rates.

A circular, in accordance with the recommendation of the Committee to the Executive Council at the last meeting, was issued to all members calling attention to the fact that the express companies have now come under the control of the Board of Railway Commissioners for Canada, and requesting that any complaints in regard to excessive rates or other grievances be filed with the Transportation Department of the Association at the earliest possible date. A number of replies have been received. It has been shown particularly that the rates out of Winnipeg are about 100 per cent. higher than they are in the East, and that there is no reason why this should be the case; also that numerous special rates and concessions have been cancelled in view of the compulsory filing of tariffs. The Department reported that they had already communicated with the Railway Commission pointing out this, and that if the express companies were permitted to withdraw these special concessions it would result in practically the same condition as has existed since the compulsory filing of freight tariffs. It was also pointed out that it is fair to assume that conditions which existed when these special concessions or reductions were made, still exist, and that if the Commission has not demanded a statement of them with a view of ascertaining whether or not they should be embodied in the tariffs that it was a very opportune time to do so, and that the whole question should be considered before any tariffs or classification were approved. The Department was instructed to again make official representation to the Board in accordance with the above.

Bills of Lading.

In accordance with a resolution passed at the last meeting a copy of the draft of general terms and conditions of carriage was furnished each member of the Committee, and the same were fully discussed. The Board of Commissioners in sending out the draft stated that in order to save time the Board did not think it should wait for a further conference between the companies and the Board, but that as great publicity as possible should be given to the consideration of the conditions in order that all parties interested may be able to make any representations they may desire and file the same with the Board. In accordance with this your Committee decided to follow the lines of the resolution passed by the Association in Convention at Winnipeg, September 18, 1906, and that a communication be forwarded to the Commission pointing out our objections to the draft of general terms and conditions of carriage submitted, and embodying the following resolution:—

> RESOLVED: That we favor the adoption by all shippers of a simple form of Bill of Lading without any conditions such as are embodied in the Bills of Lading in use by the various railways throughout the country; such form of Bill of Lading to be an acknowledgment that the carrier has received the goods for transportation; and that the Board of Railway Commissioners for Canada be requested to issue a ruling that the present forms as well as the draft of general terms and conditions of carriage as submitted by the railways in accordance with an order made by the Board under date of the 17th of October, 1904, and which was sent out by the Board on March 6th, 1907, to all parties interested, which in any way conflicts with both the Common and Statute Law, are illegal and their use and acceptance should not be forced upon the public; and that a date be fixed when such will take effect.

As it was pointed out that this question was largely a legal matter, your Committee recommends to the Executive Council the advisability, when the time came, of employing Counsel in order to protect the interests of the Association.

Supplement 8 to Classification 12.

Your Committee begs to report that advice has been received from the Board of Railway Commissioners that Supplement No. 8 to Classification 12 has been approved, to take effect not later than May 1st next. This supplement embodies a number of reductions, particularly on stoves in less than carloads, and furniture.

Interswitching at Toronto.

This question was referred to the Toronto Branch of the Association who have collected considerable evidence to the effect that the Grand Trunk Railway since March 1st have been collecting switching charges in addition to the through rate on what they term "local" or "non-competitive" traffic for delivery on the tracks of the Canadian Pacific Railway, notwithstanding the fact that other lines continue to protect the old arrangement for delivery within Toronto terminals. The Department reported that the proper official of the Grand Trunk Railway had been communicated with and an acknowledgement received to the effect that the matter would be investigated at once. It was, therefore, decided that the Department should delay taking the matter before the Commission until a reasonable time had been given to receive a reply.

The adoption of the report, moved by Mr. Harris, seconded by Mr. Booth, was carried.

TECHNICAL EDUCATION.

In the absence of the Chairman, the Report of the Technical Education Committee was read by the Secretary as follows:—

Since the last Executive Council Meeting the Technical Education Committee has held a well attended meeting, and begs to report on the following subjects:—

Commission of Enquiry.

After the Association's deputation waited upon Sir Wilfrid Laurier and other members of the Cabinet in February, arrangements were made to have a resolution placed upon the order papers favoring the appointment of the Commission of Enquiry asked for. Before the resolution could be introduced for discussion, the time set apart for resolutions was appropriated for Government business, owing to the general desire that the Premier should be at liberty to attend the Colonial Conference. Information that has since come to hand seems to indicate that the Government is favorably disposed towards the Association's request, and your Committee is hopeful that something will be done early next session.

Lectures on Technical Education.

A suggestion that the Association should arrange a series of lectures on Technical Education to be given throughout the country with a view to educating public opinion to the point where the Government will be compelled to take action has found favor with your Committee, who would recommend that steps be immediately taken to this end, that lantern slides be prepared, and that arrangements be made with prominent educationalists for delivering the lectures, preferably under the auspices of Canadian Clubs or different educational institutions.

Teaching Foreigners English.

After an interview with some of the inspectors and principals of Toronto's Public Schools your Committee is of the opinion that the School Board are doing as much as can be expected towards teaching foreigners the English language with the limited facilities at their disposal. But your Committee feels that the Boards should make even greater efforts to assimilate the rapidly increasing number of foreigners who come to Toronto, and has decided to publish articles in "Industrial Canada" calling attention to the necessity of providing instruction in English for foreigners in the schools and thus educate public opinion along these lines.

Technical Books in Public Libraries.

On interviewing the inspectors of libraries for the Province your Committee found that the Department of Education is fully alive to the importance of stocking libraries throughout the Province with books on trade and technical subjects. This year the Department is preparing travelling libraries, containing sets of such books, which will be sent around to various local libraries, thus stimulating them to purchase books of this kind. The Committee has exhorted them to even greater efforts, and has recommended the plan pursued by the Hamilton librarian who sent out circulars to all the industrial establishments in that city, stating that technical books were going to be put on the shelves in the library and asking advice from foremen and managers as to the class of books to be purchased. This plan has been very successfully worked out in Hamilton and the Committee hopes to have it taken up by the libraries in other manufacturing centres.

Toronto Technical School Prizes.

Your Committee proposes to expend the $50 granted them by the Executive in March in purchasing the following prizes for competition at the school during 1907-08:—Mechanical drawing, 1; machine drawing, 1; architecture, 1; physics, 2 (2nd and 3rd years); chemistry, 2 (2nd and 3rd years); mathematics, 2 (1st and 2nd years).

These prizes will take the form of books handsomely bound in red leather, bearing the crest of the Association and costing about $5.00 each. They will be sent up to school at the beginning of the year in a suitable case to be placed in a prominent position where they will remind the pupils what their reward for good work will be.

In moving the adoption of the report Mr. Torrance referred to the steps which were being taken in the city of Guelph to promote the cause of Technical Education. The lectures on trade subjects before the Mechanics Institute were well attended, and he trusted that the facilities for teaching English to our foreign population might be increased.

Mr. McLaughlin seconded the adoption of the report which was carried.

RECEPTION AND MEMBERSHIP.

The report of the Reception and Membership Committee read by Mr. L. V. Dusseau recommended for acceptance fourteen applications, the names of which will be found elsewhere.

The report suggested the advisability of sending out a circular letter to all members once every three months setting forth in concise form the results which the Association had accomplished through its various committees and inviting the members to make freer use of the services at their disposal.

INSURANCE.

Mr. P. H. Burton reported verbally for the Insurance Committee. He stated that no meeting had been held during the month, but that the Bills incorporating the Mutual Fire Insurance Companies had passed their third reading in the House and had also passed the Senate, and it was proposed to call a joint meeting of the prospective policyholders and the Insurance Committee at an early date to decide what their future plan of campaign would be.

BRANCHES.

The report of the Montreal Branch was read by the Hon. J. D. Rolland, and that of the Toronto Branch by Mr. John Firstbrook. Both reports will be found in another column.

Under the head of new business Mr. J. F. Ellis moved the following resolution:—

> WHEREAS, The recent action of the British Government in reducing from four pence to one penny per pound the postage on periodicals coming from the United Kingdom to Canada cannot but encourage the circulation in the Dominion of current literature from the Mother Land, thereby increasing our knowledge of and interest in the affairs of the Empire.
>
> BE IT RESOLVED, That the Canadian Manufacturers' Association place on record its appreciation of this action, and that a copy of this resolution be forwarded to Lord Strathcona for transmittal to the Post Master General.

In seconding this resolution Mr. J. P. Murray suggested that it be cabled to Lord Strathcona. Carried.

The President bespoke a livelier interest in the meetings of the Council and requested those who were present to use their influence in bringing about a larger attendance.

The meeting then adjourned.

TORONTO BRANCH.

Interswitching Charges.

At the regular monthly meeting of the Toronto Branch the attention of the members was directed to the alleged discrimination by the Grand Trunk Railway in its Interswitching charges on business originating in the so-called non-competitive points for delivery on C.P.R. sidings. After due consideration of the evidence contained in letters of complaint forwarded by members who have suffered from the new G.T.R. tariff, which went into effect on March 1st, it was decided to request Mr. Walsh, Manager of the Transportation Department, to prepare a case on this question for submission to the Board of Railway Commissioners as soon as possible.

Harbor Committee.

This Committee reported in favor of the forwarding of a letter, which they had drafted, to Mayor Coatsworth and the City Council, advocating the creation of a Special Commission to deal with Toronto's entire lake-front problem. A meeting of the representatives of various organizations in the city interested in harbor improvement will be held at an early date at which this proposal will be discussed.

American Foundrymen's Association.

At the request of Mr. L. L. Anthes the Branch is considering the advisability of inviting the American Foundrymen's Assocation to hold their 1908 Convention in Toronto. This organization is a purely Technical and Educational body, comprised of leading foundry experts of the United States and a few of Canada. A feature of its Convention is an exhibit of all the most modern appliances in operation. If sufficient support is guaranteed by the various foundrymen in Toronto and the vicinity the invitation will be extended.

Convention Arrangements.

The Branch is already making plans for the 36th Annual Convention of the Association, to be held in Toronto during September. A letter has been sent to all Toronto members advising them of the decision to hold the Convention here, and asking their loyal support to insure its success. Not a single unfavorable response has been received. The indications are that the Convention Committee will have most enthusiastic support from all the members in Toronto.

A special meeting of the Branch Executive has been called for Friday evening, at which Convention arrangement committees will be struck.

Other matters discussed at the April meeting were the report of the Technical Education Committee, which will be found elsewhere, and the motion to request the Executive Council to re-consider the recommendations of the Branch's sub-committee on Coal which were rejected last month.

MONTREAL BRANCH.

The regular monthly meeting of the Montreal Executive was held on April 11th, when a large number of matters were considered.

On account of the importance of the new Railway Bill of Lading, a general meeting of the members is to be held this week to consider the matter, and to give the members an opportunity to make objections. The transportation manager has arranged to be present.

It was decided to hold the annual meeting of the Montreal Branch on Thursday, June 27th.

The Montreal Branch, along with the Montreal Technical Institute will hold an "open" evening at the new Commercial and Technical High School on Thursday, April 25th, and if possible a strong effort will be made to open technical classes in this building at the beginning of September.

A very successful dinner was given by the Montreal Branch in the St. Lawrence Hall on the 11th inst., when nearly a hundred of our members were present. It afforded a splendid opportunity for the members to meet one another, and to hear addresses from several prominent persons, including Mr. J. Graham Gow, of New Zealand, who was the principal guest.

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SUCCESSFUL DINNER IN MONTREAL.

The Montreal Branch of the Canadian Manufacturers Association held a largely attended and very successful informal dinner and smoker in the St. Lawrence Hall, Montreal, on Thursday evening, April 11th. Mr. J. S. N. Dougall, presided. The Branch was fortunate in its list of speakers, and the members listened to many strong and practical addresses. The speeches were limited to ten minutes.

Mr. J. Graham Gow, trade representative of the New Zealand Government, urged the development of closer trade relations between Canada and New Zealand. Commercial travellers from the United States had long been doing business in New Zealand, but it was only necessary for Canada to push its trade to obtain a preference over United States goods. A first-class trade could be worked up with New Zealand. That country would willingly import many articles of Canadian manufacture, and with a 10 to 15 per cent. preferential tariff, Canadians should not find much difficulty in competing with Americans. Mr. Gow touched upon the importance of a direct mail service between the two countries, and the value this could render to commerce. In conclusion he outlined the progress made by New Zealand in recent years, and the success met with by the Government in the public ownership of mines, railways, and telegraph systems.

Mr. Geo. Caverhill, President of the Montreal Board of Trade, spoke on the work of that body, and in conclusion urged the manufacturers to beware of the growing spirit of

antagonism to large corporations. If the manufacturers took part with the mob in assailing the large corporations, they would some day find the mob turn around and attack them.

Mr. Geo. T. Bell, general passenger agent of the G.T.R., spoke of the great progress made by railways in recent years, and urged the manufacturers to regard the railways not as enemies, but as partners in the development of the country. In the fiscal year for 1905 the interest earned upon all the money invested in Canadian railways was only two and two-thirds per cent. Would such a low rate of interest satisfy a manufacturer in his business ?

Mr. Wm. Stitt, general passenger agent of the C.P.R., advised Canadian business men to be more active in promoting trade with Australia and New Zealand. At the present time United States houses were getting most of the trade because they were quicker and their goods were delivered with greater dispatch.

Mr. E. P. Heaton, Manager of the Insurance Department of the Association, gave a concise but lucid account of the work being done by his department. He spoke enthusiastically about the possibilities of mutual fire insurance in Canada and the greater work which the Manufacturers Mutual Companies would do towards reducing the cost and strengthening the protection.

Mr. Alex. McFee, President of the Montreal Technical Institute, urged the importance of technical education for Canadian workmen, and was supported by Mr. Robt. Munro.

Major Church-Howe, United States Consul-General, in a telling speech spoke of the great future which he saw in Canada, and of the intimate relations which existed between the two great countries of the North American continent.

In conclusion Hon. J. D. Rolland proposed the toast of the Chairman, and also gave some interesting reminiscences of railway growth in Canada.

In the early part of the evening the music was supplied by a large Auxetophone kindly provided by the Berliner Gramophone Company, one of the members of the Association. The songs of Mr. C. H. Earle, and Mr. Sidney Jarvis were very much appreciated.

Objections to High-Speed Cranes.

There is at the present time a demand for excessively high speeds, and the motives of the manufacturers who advise against them are sometimes misunderstood. High speeds are not always desirable, and in a paper read recently before the American Foundrymen's Association, Mr. Harry Sawyer pointed to the disadvantages of excessively high speeds in cranes. He said :

"The one advantage sought in high speeds is a saving of time, but this is often overestimated. Take, for example, a 10-ton crane with full-load speed of 20ft. per minute. We may assume that the average load will not be more than one or two tons, that the average speed for such load will be 30ft. per minute, and that the average lift is 5ft. Allowing 50 per cent. more time for acceleration from a state of rest, and we find the time for an average lift to be fifteen seconds.

"If the speed of a hoist were doubled, it would at first appear that one-half of this time, or seven and one-half seconds, would be saved. If twenty lifts were made per hour, the result would be a saving of only about 4 per cent. of the time. When it is remembered that many of the lifts must be very slow, regardless of what the crane is capable of doing, and that the traverse movements are usually started as soon as the load is clear of surrounding objects and before the hoist movement is stopped, the actual saving is reduced to a very inconsiderable amount of time.

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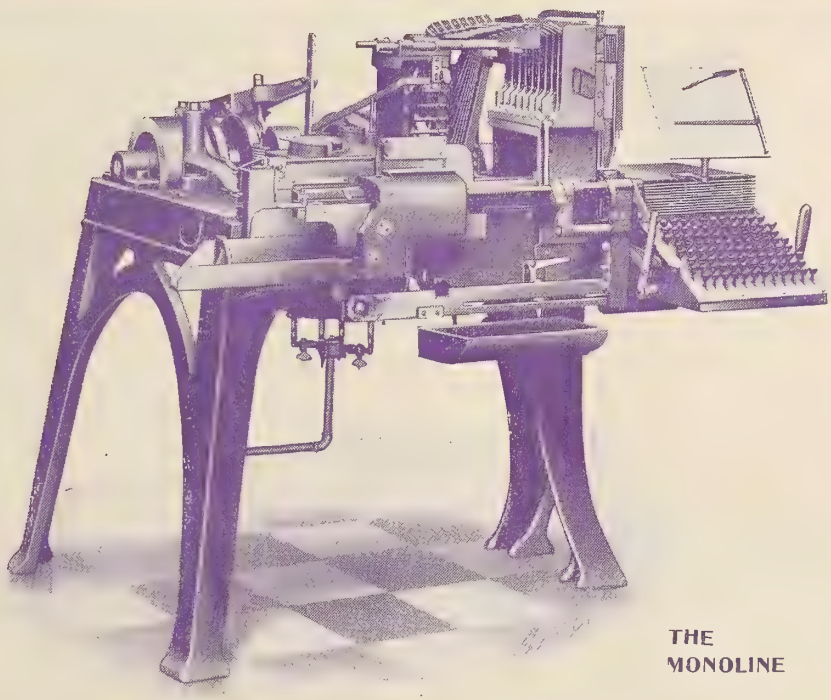
—A decision of great importance to sellers of machinery in Germany has been given by the German High Court in a case arising out of a "hire purchase" contract. A large amount of machinery is supplied on credit in Germany with the condition that the machinery remains the property of the seller until payment is made in full. Hitherto such an agreement has been considered binding, but the High Court seems now to have decided that it has no legal validity, and that no part of a plant can be subject to special rights. Some idea of the importance of this decision may be gained from the statement that in 1905 no less than 168,014 such agreements were entered into by 248 firms, machinery in question being no less than 60 million marks, almost half the total turnover of the makers concerned. The matter is being taken up by the chambers of commerce and employers' associations, and they are unanimous in calling for an alteration of the law.

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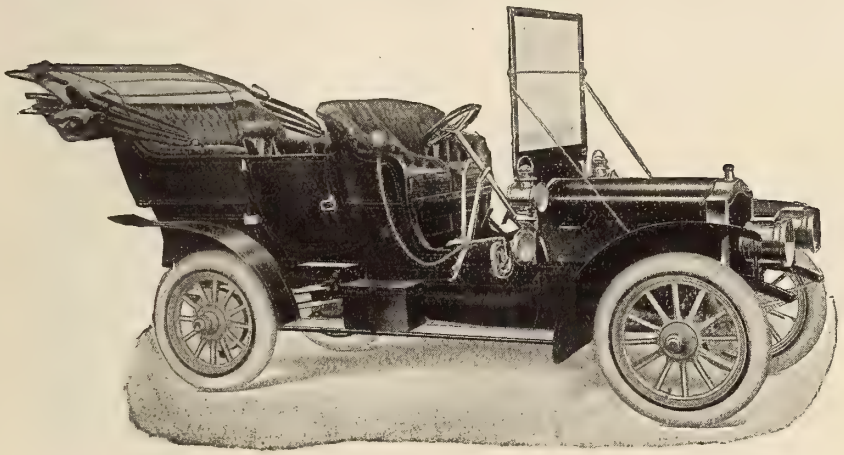
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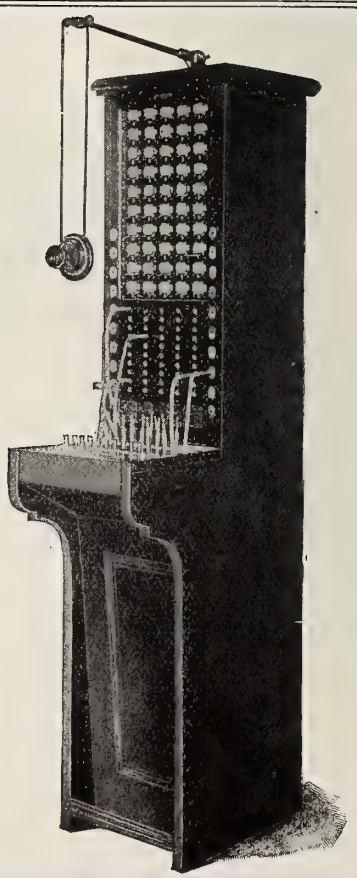
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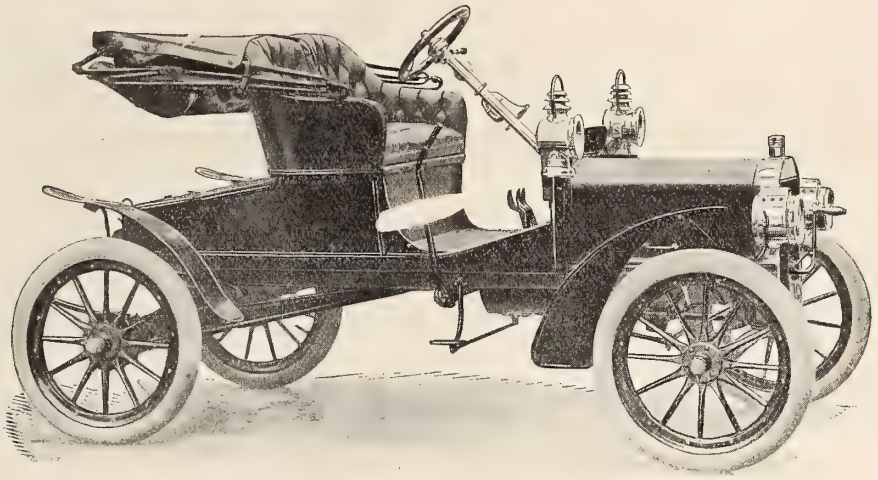
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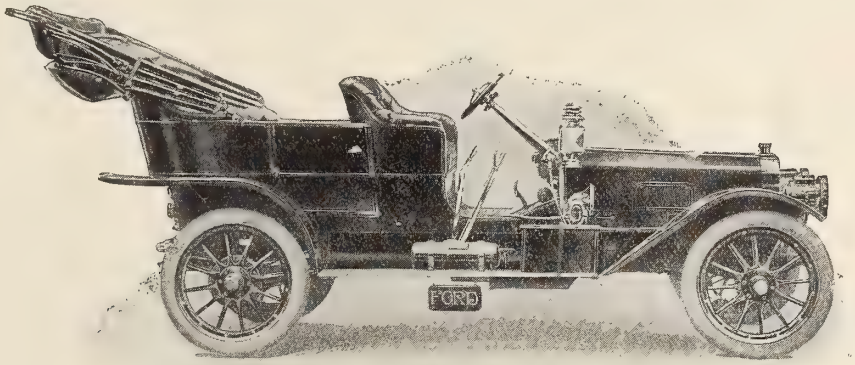
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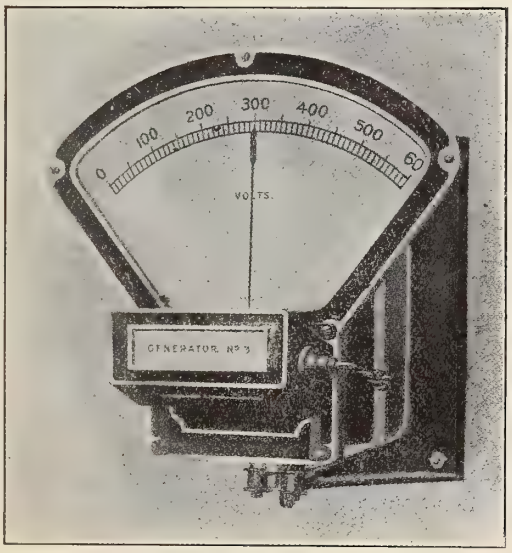
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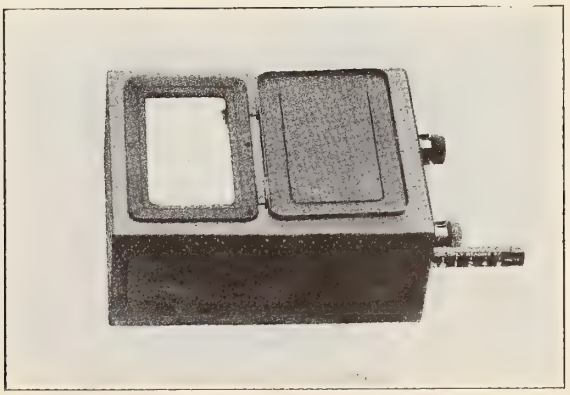
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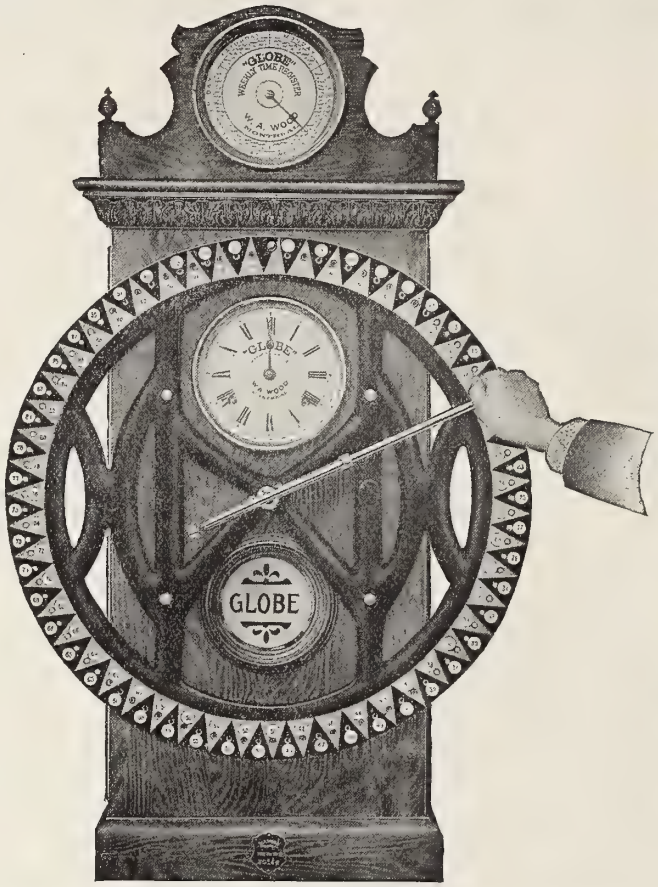
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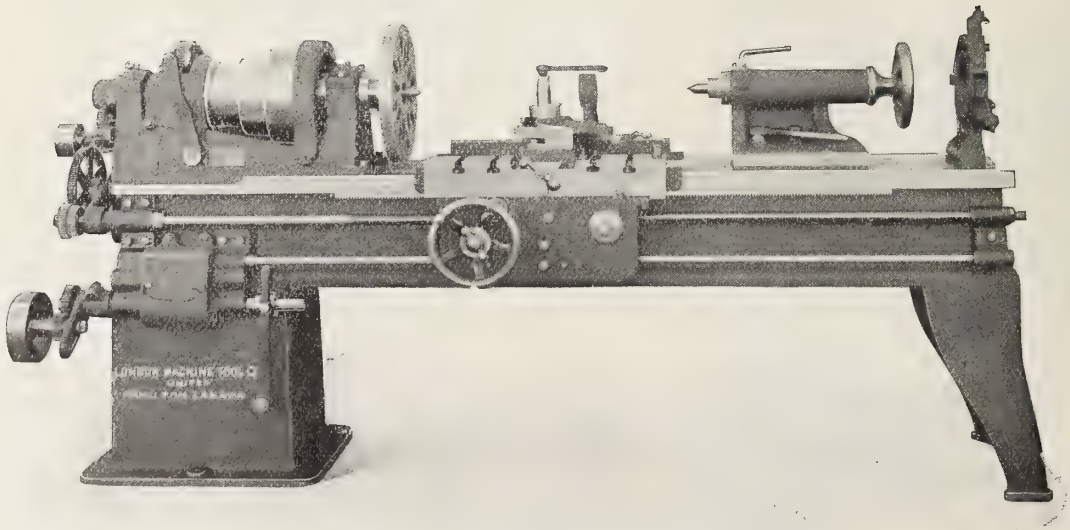
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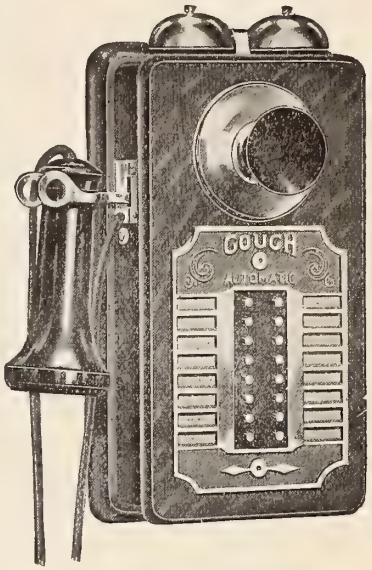
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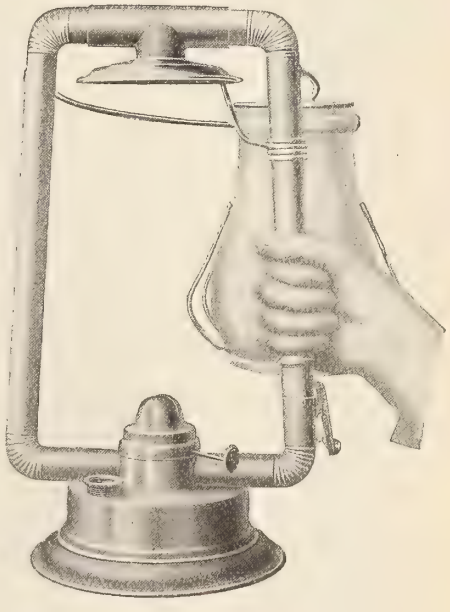
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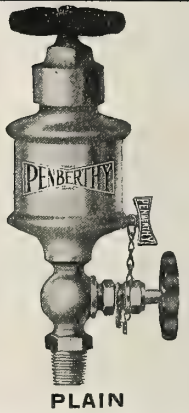


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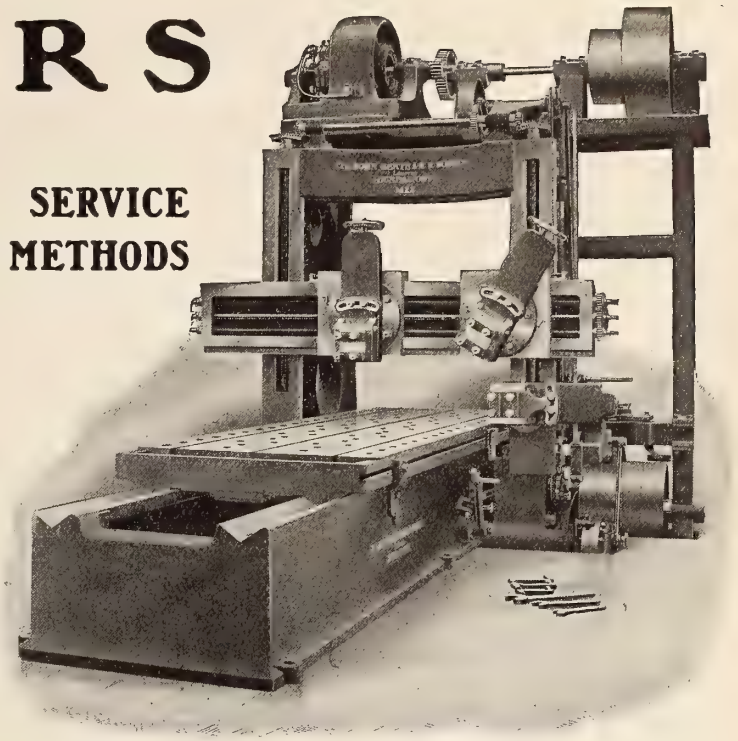
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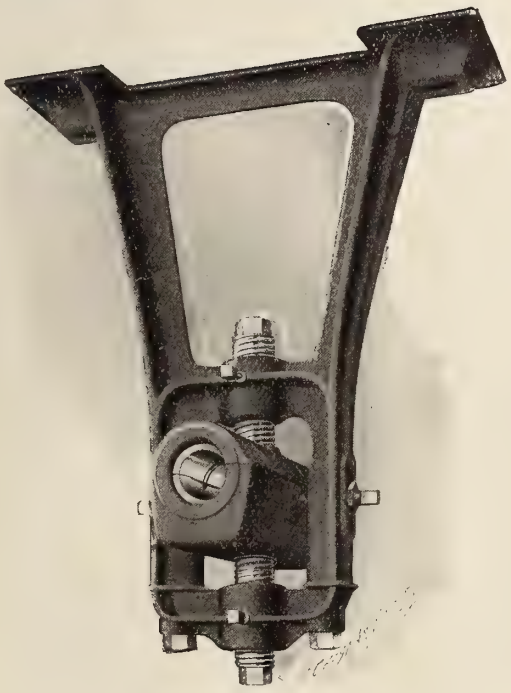
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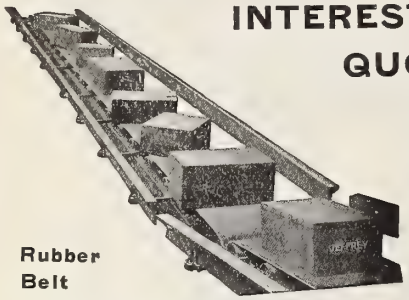
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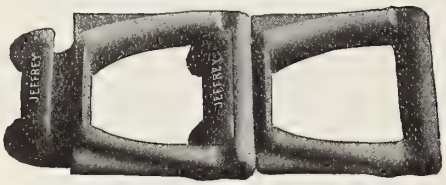
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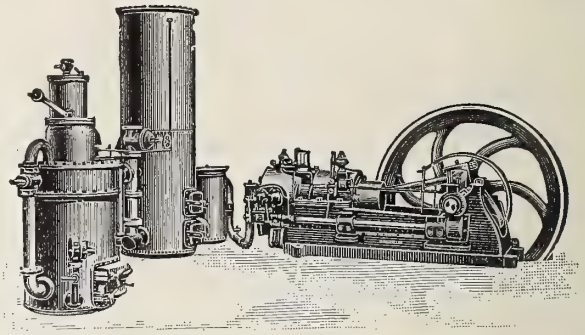
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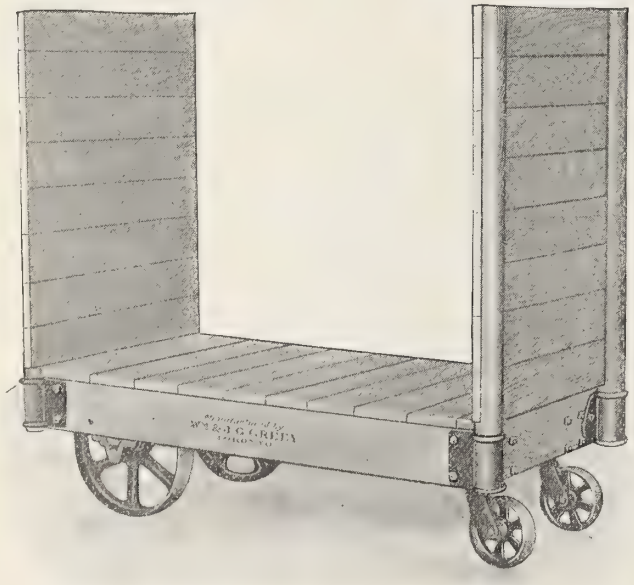
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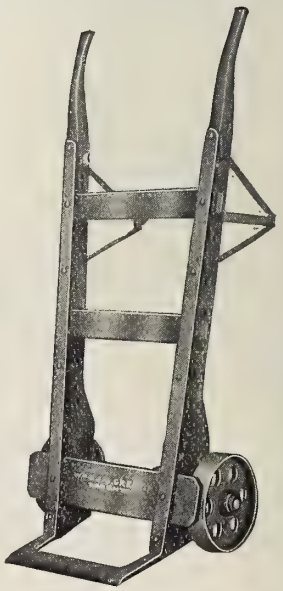
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Vol. VII. TORONTO, JUNE, 1907. No. 11

INDUSTRIAL CANADA

Issued monthly as the the official publication of the Canadian Manufacturers' Association (Incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada.

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REPORT OF THE ONTARIO BUREAU OF LABOR.

IT would be well sometimes if more official attention were given to departmental reports. Some Government publications in this country stand sadly in need of revision in both style and contents. The cold reception given them at the hands of the press and the public is a hint that should be taken to heart.

An example of how poor a report may be is the present publication of the Ontario Bureau of Labor. It starts off with the director of the Bureau congratulating his employers on opening a free employment bureau. Its chief feature is that it is primarily a directory of labor organizations in the Province. It follows this list up with others of National and International Labor organizations having affiliations in Ontario, and United States Labor Bureaus. These lists are well enough in their place, but why should they be continually reprinted at public expense? And why should the public publish a directory of private organizations?

The next prominent feature is what purports to be a summary of Ontario industrial statistics. Nothing is farther from the truth. One section includes returns from three establishments, but there are no less than twenty of the same class in Toronto alone! That is a typical example. Why should any official, however incompetent, be allowed to publish absolutely misleading and, because of their incompleteness, therefore, worse than worthless figures?

Then follows labor news from Great Britain, an abbreviated and worthless table on "World's Commerce," a pointless section on "Successful Industrial Effort in British Columbia;" notes on labor conditions in Germany as reported by the General Federation of German Trade Unions, reprints from the Ottawa Labor Gazette, etc.

If a separate labor report is deemed necessary for Ontario, let it cover conditions in the Province and not attempt to cover up its inability to find useful material by miscellaneous excerpts from publications which could much more safely and profitably be read at length in our magazines and libraries. Let the Government consider the advisability of further issues of this kind.

EFFICIENCY.

EFFICIENCY is a master word. It is the ideal towards which all efforts must be directed. It is that upon which prosperity, industrial and agricultural, must eventually depend. We are filled with amazement as we view the wonderful progress made by Germany in recent years. The national life is a unit. Education, manufacturing, farming, chemical research, all converge to the one point, efficiency. In the case of the Germans, efficiency has grown from a means almost to an end. They find a delight in doing things in the most economical way, using processes that reduce the cost, using labor-saving machines that reduce the time. That is efficiency. While other nations were selling woolens in every corner of the world, Germany had her expert chemists experimenting with dyes. In time German dyes led the world. That was a mark of efficiency. Other nations talked for years about technical education. Meanwhile German manufacturers began invading the markets of the world. They undersold the old manufacturers so scandalously that the British makers rubbed their eyes with astonishment. When they recovered somewhat from their surprise they began investigating the reason. While they had been talking technical education the Germans had adopted it. They had greater efficiency. Hence, they could undersell their English rivals.

There is room for greater efficiency in Canada. In the development of a rapidly growing country there is a strong

tendency to sacrifice everything to speed. "Early delivery" is the apparent essential. The natural resources are so great that the first comers, with the utmost prodigality, just take the choicest fruit. They cut down the tree to get the apple. The rewards are quick and ample. But the gleaners come after, and from them is demanded greater care, that the most may be made of what remains.

We have but to instance the lumbering industry to illustrate this point. At first all that was thought of was to fell the trees and float them over to be manufactured in the big mills across the line. After a while it became evident that our timber supply was not inexhaustible. In fact, a big hole had already been made in it. The advisability of husbanding our resources and doing the manufacturing ourselves became appreciated, and Ontario put an export duty on unsawn logs. The demand for efficiency, as exemplified in the more thorough use of our resources, was heard.

But national efficiency does not consist alone in carrying on advanced processes of manufacture. It consists no less in carrying them on with the best results. It goes beyond the cutting of trees to the manufacture of the logs into lumber and furniture; but it also implies the manufacture of lumber and furniture as well as or better than any other people can do. If we are to be an efficient people, we must not only make things, but we must make them well.

The competition of the world has become so strong that we cannot afford to fall behind in the race for efficiency. We may enjoy some advantages and suffer from some disadvantages that older nations have not encountered. But in striving for efficiency we can use the experience of others. Technical education must come. Every day that we put it off is a day lost in the fight for industrial development. As such education advances and becomes more perfect in other countries, our own case will become all the more precarious. We must have highly skilled workpeople. We must have the benefit of improved processes and scientific investigations. We must educate our people towards efficiency.

INDIVIDUAL LIBERTY IN LABOR.

A SERIOUS industrial disturbance has occurred in Toronto. It is basic in its character, going back to first principles, the right of a man to work. It is a fight between the open and the closed shop. No one can say that the trouble has been stirred up inconsiderately. For weeks it has been known that certain conditions would no longer be tolerated by the employers. These conditions were steadily insisted upon by the union and a strike followed.

It would appear almost unnecessary to enter upon a discussion of the status of the union, if it were not that certain papers, usually sane in their editorial pronouncements, have missed some of the essential elements of the case. In its fear that building operations will be tied up and immense loss inflicted on the whole community, the "News" proceeds to state that whether rightly or wrongly the union is now a fixture, and so it must be considered. The employers must deal with the unions and recognize them. The "News" fails to appreciate the fact that the unions do not contain by any means all the workmen. It fails, too, to appreciate the fact that the reason there aren't more non-union men in certain trades is because the autocratic and tyrannical conduct of those unions has crushed out all independent labor, by means that are most unfair.

The employing plumbers have taken their stand on the unassailable ground that one man has as much right to work as another. The closed shop is one of the most indefensible institutions of present industrial life. What fair argument can be advanced why one man, equally efficient a workman as another, should be prevented from working, merely because he refuses to join a union? What divine influence has the union that membership in it at once makes a man eligible, who before was not? Is it that he becomes a better workman? Not, at all. A man who is not fit to work now, is, according to union ethics, worthy of a "minimum wage" half an hour from now, if in the meantime he has joined the union. What is the change then? Chiefly a relaxation of the conscience; a subscribing to articles forbidding him to do his best. There are some men whose moral make-up prevents them from agreeing to do less than their best. Some men still think that if they have been endowed with greater capacities than the majority they have an obligation to produce better results than the majority. Such men have no place in the union. Its tendency is to reduce all to a uniform grade—the productive power of the most reluctant.

The stand of the employers is eminently fair. It is not only fair; it is consistent. We have yet to hear of an employer discriminating against a union man. Membership in a union, objectionable as many of the features of the union undoubtedly are, does not prejudice a man's chances of employment. But neither should non-membership in a union prejudice his case; and the employers say that henceforth it shall not.

Take the case of the plumbers. In the first place the union exacts an entrance fee of fifty dollars from new members. This in itself turns it into a close corporation. The fifty dollar fee is not for carrying on the work of the union. It is for the sole purpose of restricting membership, and hence making membership more valuable. Again it forbids a member from riding to or from a job on a bicycle. The job wouldn't last long enough if he did. This constitutes an unwarranted tax upon the public. It is a senseless exaction that the public, slow as it generally is to more, will not tolerate. As has been well pointed out, if a workman forgets a tool he walks to the shop and back and his time is charged to the job. The no-bicycle rule cannot be justified. It constitutes too flagrant a waste of time.

Limitation of apprenticeship is another point that cannot stand. The union says that only a certain number of boys shall be taught the trade, the ratio being one apprentice to five journeymen plumbers. This is a regulation, essentially selfish, absolutely unfair. The wrong is threefold. It hits at the boy, who is thus debarred from learning a trade whereby he may earn his livelihood. It hits at the master plumber, who is prevented from securing the necessary help to carry on his work. It hits at the whole nation, because the prosperity of all is bound up in the provision of an adequate supply of skilled workmen. It helps the union by making it a close corporation, by placing the employers at the mercy of an inadequate labor supply, by artificially enhancing the price of labor. But in this country a boy has an inalienable right to work at a trade. If the proprietor of a shop is willing to take a boy on, no intermediary should be allowed to interfere in that arrangement. Is it not more important that every boy be given the possibility of learning a good self-sustaining trade, than that the men already engaged in that trade should be given the power to extort illegitimate and exorbitant profits for themselves?

What would be the result of the general application of this rule, limiting the number of apprentices in all trades? In every trade there would be a gradual, though rapid, lessening of the number of workmen. The apprentices coming

up would not equal the number of older workmen dropping out. Yet the demand for workmen will be just as steadily increasing. The development of the country would stand still, and then go back. The men in the trade would be making big money. But what of the great mass of the unskilled, the hewers of wood and drawers of water, who would be left without a trade, not through any fault of their own, but because they were autocratically refused the privilege of learning one? What, too, would be the effect on the nation from this great increase in the ranks of the unskilled? Industrial degeneration and material decay.

The open shop notice has been posted in the plumbing shops of Toronto. The action, just as it is, was taken only after the demands of organized labor became altogether intolerable. The stand will restore the union to its legitimate position. No employer questions the right of workmen to join a union or to strike. They all question the right of any organization, within or without the shop, to say that another man shall or shall not be employed. That is a question between the employer and the individual. The open shop represents one aspect of the individual liberty which we all prize.

THE LEAVEN AT WORK.

A RECENT Associated Press despatch from England said "three months ago the movement (Colonial Preference), according to the Liberal press, was not only 'dead' but 'damned.' To-day it is admitted that Colonial Preference is the main issue of party politics." What has brought about this change of condition in the Motherland? A number of things, but chiefly sober reflection. When Mr. Chamberlain launched his campaign for fiscal reform the energy of his methods and the novelty of his idea antagonized those whom he did not carry with him. His opponents had to fight to save their position, and in the heat of the conflict they fought with enthusiasm. That is the English way.

But after the last election a quiet followed, which permitted the people to consider without partisan prejudices the questions which had been raised and on which the elections had been contested. There was a good deal of food for thought, in spite of the unparalleled prosperity of the nations of the world, in which England shared to a large degree. Most noticeable of the symptoms was the migration from the land, to swell the ranks of the unstable and in many cases incompetent hordes of the city. Even the most unthinking felt what the large emigration to America meant. It is true that the immense business which was being done in the cotton districts provided abundance of work for the people there. Yet with wages at the highest point the working people felt that they could do better in the United States and Canada.

Here let us consider in view of this movement of population what the effect of protection is on a people. We are told that in England the line between living and starvation is so closely drawn that a shilling a hundred on flour would turn the scale. Yet those same people go to the United States or Canada where the cost of living is materially higher and they live far better, with greater comforts and in greater independence. Is not this in itself an adequate proof that a policy of protection redounds to the benefit of the working class?

When the subject of building workingmen's houses was under discussion recently a difference was pointed out between Canadian and English workmen. In England workmen are satisfied to rent their houses. In Canada the scheme for house-building had to be worked out on the principle of selling them to employees, since individual ownership was the accepted idea here. Does not the independence which comes from owning one's own home, an independence that is widely enjoyed by the wage-earners on this side of the Atlantic, mean something? What have the workmen of England got to offset this?

So public opinion has been working quietly and sanely. Three months ago not only was England governed by a party that was wedded to free trade, but Imperial preference had no recognized place in the policy of the Opposition. Mr. Balfour, the leader of that Opposition was not yet convinced of its necessity. To-day a change has taken place. The same Government is there, it is true, and with the same reluctance to touch the fiscal question; but the Opposition has once more become a working unit. Mr. Balfour has made his speech before the Primrose League. He has become an avowed and ardent tariff reformer.

Canada has been willing to let the leaven work of itself. She has not urged the Mother Country to change her fiscal system unless she felt perfectly assured that it would be advantageous for her to do so. It is all the more pleasant to observe the adhesion to the ranks of protectionists of such men as Mr. Balfour. Nothing but positive belief in the efficacy of protection would cause him to adopt the policy. It was not the result of momentary enthusiasm. He did not act when to act would possibly have advanced his political fortunes. In his present subscription to the doctrine of protection he brings the result of a reasoned consideration.

Colonial preference is now the main issue between the two great parties in England. Its Imperial aspect is inspiring. From every corner of the globe came delegates to the Colonial Conference, each one feeling the benefit that would accrue to the whole by a preferential tariff in England. The attitude of the colonies is not unduly aggressive. They take their stand on the ground that since the people of England must pay some taxes on imports, they might as well pay them in such a way as to benefit the colonies. The colonies do not ask the people of Great Britain to burden themselves with taxation. But they urge them not to raise a catch phrase into an unbending dogma. The free breakfast table is a pretty phrase with which to catch the workingmen. It should have no place in rational statesmanship. If a tax can be transferred from something else to an item of consumption at the breakfast table, in such a way as to assist the whole Empire without increasing the total cost to the British consumer, does not that lie along the path of true statesmanship?

PRUDENT MOVE OF POST OFFICE DEPARTMENT.

THE new postal regulations went into force on May 8th. Previous to that newspapers and periodicals were carried through both Canada and the United States at the local rate for publication. That is to say, a paper mailed in New York paid a half a cent a pound to the United States Government Post Office Department, and it was carried to any point in Canada without further charge. Canada received nothing for the service she performed. This regulation was reciprocal. Canadian publishers enjoyed the same privilege in sending their publications to points in the United States.

The reciprocity of the system was, however, more apparent than real. For every ton of Canadian matter which was distributed in the United States, ten tons of American papers were distributed in Canada. At the same time the United States, with their much larger service, were enabled to handle the comparatively small additional matter from this country with much less inconvenience and expense than we could handle their comparatively large contributions. This may be illustrated concretely by the following consideration:

Neither country received anything for delivering the publications of the other. Hence the cost of that much of the postal service fell upon the Government, that is, upon the people. Therefore five and a half million Canadians paid the cost of ten tons, while eighty five million Americans paid the cost of one ton. The ratio of expense per capita to the people of the two countries is 155 to 1, with Canada on the long end of the expense. Under the old regulations for every cent a citizen of the United States had to pay to cover the cost of delivering Canadian papers in the United States, a Canadian had to pay $1.55 towards the carriage of American matter. The disparity was so great that a continuance of the old system would have been preposterous.

Some Canadian publishers are adversely affected by the change. Yet outside half a dozen of the metropolitan papers no serious financial burden will be imposed. "La Presse," of Montreal, has twenty thousand subscribers across the line, and the additional cost will amount to $80,000 per year. The "Globe," of Toronto, has a large circulation in the United States, but its publishers have accepted the change as advisable in the public interests. But in most cases the cost will be small. United States publishers have felt the pinch, and have registered a vigorous protest. By the strength of their objections may be judged the benefits which will accrue to this country.

Postage is not a tax for a privilege. It is distinctly the payment for work to be done. The Government take out of the hands of carriers, express companies, etc., the work of delivering mail, in order that safer and better service may be given. It was never intended that such a service should be done at less than cost. It has been deemed best to make a fixed rate no matter how far within the country the mail matter may have to go. Hence one letter may pay more, another less than cost. But that any large amount of mail, should be carried at a heavy loss, was certainly not contemplated.

The United States post office department have figured that it costs them about six cents a pound for carrying second class mail. From the fact that we have not so much to carry, we may fairly assume that the cost per pound here is more than that. What reason is there for us carrying great quantities at a rate of one cent per pound? Extremely low rates are granted to Canadian publications because it is felt that the Government should encourage the dissemination of information, that the public may take a more intelligent interest in public affairs, and that they may watch critically how they are governed. It is well that the public should be given every opportunity of becoming familiar with Canada, its resources and possibilities, its public men and public questions, its institutions and people. Such familiarity will help to make good citizens, and will redound to the welfare of the state. But what advantage commensurate with the cost does Canada get by admitting papers whose political and public discussions are altogether foreign to our life? We do not need them as newspapers. We get that feature in our own papers. On civic and state questions we have far more need of a sturdy, healthy Canadian journalism.

Some criticisms have been made of the Government's refusal to allow United States publications to be expressed into Canada and mailed here at the old rate of one cent a pound, which was formerly granted. Such critics seem to have overlooked two main points. In the first place it is specifically stipulated in the postal convention that neither country shall allow mail matter to be brought in in bulk and mailed at less rate than that obtaining for that class of matter in the country of origin. Canada formerly allowed papers to be freighted in and mailed here at a cent a pound. But they could have been mailed in the United States for half a cent a pound. Hence there was no contravention of the convention. They can be freighted in still, but they will have to pay four cents a pound. The second point is that the old rate of one cent was far below the cost of carriage and it is the loss entailed by this difference between cost and revenue that we are trying to overcome

No change from existing regulations can be made without some unfortunate, even if temporary, results. There are United States papers which we all agree are of a high order of merit. Some publications are unexcelled in their breadth of view, saneness of judgment, and literary excellence. We should regret to see the circulation of these cut down. But no doubt such papers, which have won a position for themselves on their own merit, will retain their readers even at the increased price which the new postal regulations will necessitate. Those who will eventually be the losers are the publishers of pure advertising sheets, who having once got a name on their list, continue to send their paper without hope of getting paid for it, merely on the strength of the ads. which they carry. Such parasites will be eliminated to the great advantage of the Canadian people. The new regulations are a reasonable and prudent precaution against a continued drain on our Post Office Department.

AN IMPERIAL PROJECT.

ONE subject of imperial calibre, was advanced a stage at the Colonial Conference. The fast all-red service from England to Australia via Canada is now a live proposition. We already have a good service on the Atlantic, but it is not fast enough. If traffic is to be diverted from the United States ports it must be by supplying a better service by the Canadian route.

This can be done. Halifax is about six hundred miles nearer to Liverpool than is New York. With steamships of equal speed, this makes a difference of at least twenty-four hours. The scheme in a word is to put on a twenty-four or twenty-five knot service on the Atlantic, improve the transcontinental service so as to reduce the time taken to cross it to a minimum and supplement this with an eighteen knot service on the Pacific.

This is a day of big transportation projects. Canada is on the highway of international commerce. For many centuries the Mediterranean, as the approach to the Straits of Suez, took its toll of the commerce passing from West to East, or from East to West. It and the perilous trip around Cape Horn formed the only two means of communication. Canada now forms a connecting link.

Commerce coming this way has two main objectives, A large tonnage goes to Australia, New Zealand, and the Asiatic countries, China and Japan. An immense amount of it, too, comes to Canada and the United States. The trade between the two continents is increasing at an enormous rate, and the handling of it and its distribution will be of ever-increasing importance. Most of it, unfortunately, now, is transacted through the ports of New York, Boston, and Portland. It means much to Canada that she should get her share of it. Many industries would spring up and flourish if we had this immense tonnage coming to our own ports.

There is a growing sentiment in favor of developing our own sea-ports. The question has been much discussed of late, and it is now only a matter of time until it is accomplished. But this is only part of a bigger scheme. In transportation, more than in anything else, a big outlook is essential. Well equipped harbors will be useless if commerce does not come to them. If the steamship lines and harbors are both excellent they will be unavailing unless the railroads have sufficient distributing facilities.

COMMENT OF THE MONTH

Mr. Cockshutt Discusses National Problems.

In speaking before the Halifax Canadian Club recently Mr. H. Cockshutt dwelt with special emphasis on the importance of transportation facilities in our scheme of national development. It is a good thing to take a glance at a map occasionally, just to get a fair appreciation of the vastness of the country which we inhabit. Yet we must be one people, actuated by common ideals, mutually sympathetic in in our efforts for material prosperity, with the ability to have a commerce with one another, both personally and in the interchange of commodities. To effect these ends transportation facilities must be developed. In the fine picture suggested by Mr. Cockshutt, "Canada to-day is like a young giant sitting astride the North American continent, one foot on the Atlantic shore and one on the Pacific, just awakening to a realization of his strength after a sleep of centuries. But circulation is sluggish; it is still comparatively dull. Veins and arteries need to be opened up so that the life blood of commerce can flow freely to every part and quicken the organism into energetic action. The veins and arteries of Canada are its railroads and its waterways.

Rail and Water Routes.

The Maritime Provinces are not sufficiently provided with railroads. Year by year extensions have been made in the west, until that country is becoming a net-work of rails. But the business done through the port of Halifax is growing no less rapidly than is production in the West. Last year Canadian imports of dutiable goods at Halifax totaled $5,340,931, and exports $9,927,156. To handle this there is at the present time only one line of railroad. This is manifestly inadequate. Our winter ports on the Atlantic seaboard should be fed by the Intercolonial, the C.P.R. and the G.T.P. Mr. Cockshutt's remarks on transportation are particularly apropos, since the forthcoming report of the commission on the Georgian Bay Ship Waterway has brought the whole subject up for discussion. Our canal system must not be discussed in a piecemeal fashion. Like our railways, it must be gone into as one great project, so that every dollar of expenditure will be directed to one clearly defined end. Only thus shall we get that greatest boon of a producing country, easy access at the minimum cost, to the markets of the world.

Control Our Own Trade.

How are we to build up our own ports? This, too, was considered by Mr. Cockshutt in his address. Trade must be diverted into purely Canadian channels as much as possible. Where cargoes break bulk and are trans-shipped large cities spring up. We have but to look at the Atlantic seaboard of the United States to realize the truth of this statment. New York, Boston, and Portland are great cities, whose greatness has arisen from the fact that through them has flowed the commerce of the whole nation.

Canadian trade has helped to make these cities what they are. The more business that is done through a port the better become its facilities for handling business. Improved warehouses and docks, more steamships, quicker methods of handling, all come as a result of greater traffic. And conversely the better the facilities, the more the business that will offer.

But in the meantime into what position are we putting ourselves? In transacting our business through United States ports, we have been systematically neglecting our own coast cities. We could not at the present time handle our commerce through Canadian ports. The harbours are not sufficiently equipped; they have not enough railway connection; they are woefully lacking in wharfage, warehouse and general terminal accommodation. Yet the United States might at any time deny us bonding privileges. It is true such privileges are reciprocal, but the fact remains that to a considerable extent our commerce is at the mercy of the authorities at Washington. Urgent demands have been made before this on the American side for the withdrawal of this right. It is the part of prudence to free ourselves as soon as possible from this dependence.

Preference by Canadian Ports.

Improvements in the present conditions must be made, but they must be made rationally. As Mr. Cockshutt said in discussing the attitude of the Canadian Manufacturers Association towards the principle of granting a preference only on goods imported through a Canadian port, while such a policy is right, if it were put into effect immediately it would disorganize business and would result in a congestion of freights, delay in deliveries and loss and dissatisfaction all round. But that such is the case is the best reason for us setting to work with a will to remedy the difficulties. The insufficiency of railways will be overcome within the next few years. How about the ports themselves? Few will question Mr. Cockshutt's statement that the Federal Government should take hold of the big ocean ports and bring them up to a suitable standard of efficiency. It is distinctly a national work. Already $72,000,000 have been spent on waterways above Montreal, on the Great Lakes. The ocean harbours must not be neglected. When the railways are completed and the harbours improved, then preference by Canadian ports cannot come too soon.

A Warning to Employers.

Damages to the amount of $2,000 were recently awarded by the Master in Chambers at Osgoode Hall, Toronto, in a case where action was brought by one employer against another for enticing away hands who were working under contract. The evidence submitted showed that the defendant had mingled freely among the plaintiff's men at the noon hour and after six o'clock, offering them inducements in the way of higher wages and free transportation to leave their jobs and take employment in another part of the country. Among the men thus persuaded to throw up their jobs were a number who were under contract, as well as some indentured apprentices. It was an easy matter for the plaintiffs to prove that they had sustained damages, which were assessed by the court as above. Experience of this kind comes high, and it behoves most of us to profit by the object lessons furnished in this case.

The Call to Arms.

Half a million dollars a year is what the National Association of Mnaufacturers of the United States proposes to raise in order to protect its members against violence and interference on the part of organized labor. For an organization less than 3,000 strong it seems like a goodly sum, but it took the delegates at the annual convention less than

one minute to decide when President Van Cleave asked them if he could have the money. The whole gathering was swayed by the one sentiment, dominated by the one impulse, to stand solidly together for the protection of individual rights. What the Halifax tariff resolution is to the Canadian Manufacturers Association the New Orleans labor resolution is to the National Association of Manufacturers. It is their declaration of Principles, and as Secretary Cushing truly remarked, at the present time it seems like a reminiscence and a prophecy. All good things will bear repetition, so we offer no apology for presenting the platform of the National Association once more to the readers of Industrial Canada.

Declaration of Principles.

(1) Fair dealing is the fundamental and basic principle on which relations between employes and employers should rest.

(2) The National Association of Manufacturers is not opposed to organizations of labor, as such, but it is unalterably opposed to boycotts, blacklists, and other illegal acts of interference with the personal liberty of employer or employe.

(3) No person should be refused employment or in any way be discriminated against on account of membership or non-membership in any labor organization, and there should be no discrimination against or interference with any employe who is not a member of a labor organization by members of such organization.

(4) With due regard to contracts, it is the right of the employe to leave his employment whenever he sees fit, and it is the right of the employer to discharge any employe when he sees fit.

(5) Employers must be free to employ their workpeople at wages mutually satisfactory, without interference or dictation on the part of individuals or organizations not directly parties to such contracts.

(6) Employers must be unmolested and unhampered in the management of their business, in determining the amount and quality of their product, and in the use of any methods or systems of pay which are just and equitable.

(7) In the interest of the employes and employers of the country, no limitation should be placed upon the opportunities of any person to learn any trade to which he or she may be adapted.

(8) The National Association of Manufacturers disapproves absolutely of strikes and lockouts, and favours an equitable adjustment of all differences between employers and employes by any amicable method that will preserve the rights of both parties.

(9) The National Association of Manufacturers pledges itself to oppose any and all legislation not in accord with the foregoing declaration.

Private Initiative and Public Enterprise.

Horace Greeley it was who once remarked that the way to resume was to resume. The manufacturers of Milwaukee have adapted the truism of their illustrous fellow countryman to their own local conditions, and proclaimed to the world that the way to establish industrial schools is to establish industrial schools. Some two years ago a number of the more public spirited among them subscribed from their own pockets a sum sufficient to equip a first-class trade school where every opportunity was given the ambitious young workman to learn the theory underlying his vocation and to become acquainted with the most advanced ideas practised by his trade in other countries. So great has been the success of the experiment, and so popular has the institution itself become among the artizans of Milwaukee that the city fathers, with an eye to their re-election, have volunteered to take the school under the municipal wing and to provide for its support out of the school taxes. It is undoubtedly true that private initiative creates public enterprise, and the manufacturers of Canada may yet have to go down into their own pockets to start the movement for industrial education before the eyes of our sleepy politicians are opened to the fact that there is a strong and insistent demand for it.

A Premium on Law-Breaking.

In this connection a most remarkable state of affairs was recently brought to light in the Boston police court. A lad of fifteen was summoned before the magistrate for what appeared like a wilful misdemeanor. On examination it was shown that it was the lad's first offence, and the magistrate decided to let him off with a warning. To everyone's surprise the prisoner pressed for his own conviction, asking that he be sent to an industrial school. On being questioned for his reason, he stated that he wanted to be given an opportunity of learning a trade. Owing to the limitation of apprentices by the unions, the lad had found the door to a trade by any honest channel closed to him. He was compelled therefore to become a criminal in order to qualify as a skilled artizan.

While this is probably an extreme case, it illustrates a tendency of modern industrialism which society cannot afford to ignore. No privilege ought to be enjoyed by the criminal class which is denied the respectable and law-abiding citizen. If the trade school is conceded to be a valuable instrument in reclaiming the law-breaker to respectability, and in making him a useful citizen, it would surely be a much greater blessing to society if its doors were thrown wide open to all who might use it as a stepping-stone to individual as well as national prosperity.

A New Get-Rich-Quick Scheme.

The Association recently had occasion to warn its members against having anything to do with a certain firm in Buenos Ayres, who evidently took the manufacturers of this country for easy marks. Their original plan of operations, conducted on a very limited scale, had all the earmarks of a genuine transaction, and worked with more or less success. It consisted in making the usual enquiries for catalogues, price lists, etc., which were followed up in due course with an order for a trial shipment. Accompanying the order was a 90 day draft on a house in Barcelona, Spain, for whom the Buenos Ayres firm were ostensibly acting as a branch. In the ordinary course of events the draft would be put through for collection. At the end of a month word would come back that it had been accepted, and that the drawee was evidently good for it, as he had a fair sized account. The goods would accordingly be shipped, but long before the draft had matured the Barcelona house would have packed its few belongings together, closed out its bank account, and like the Arab, silently stolen away, leaving the shipper at the mercy of a dishonest consignee thousands of miles away. If he were sharp enough to smell a rat before the goods had been delivered he might sell them at a sacrifice to some one else, or pay freight on them back again. If on the other hand they fell into the clutches of the consignee he might whistle for his money.

Vaulting Ambition O'erleaps Itself.

As already stated, this plan was worked last year with success on a small scale, so that the projectors must have felt encouraged to greater activity. This year they launched

a campaign covering the whole of Canada, on the fruits of which they evidently expected to be able to retire for life. But as usual, in their eagerness to get bites they made their bait too tempting, and drove away the very fish they hoped most to catch. One firm received an order for $500 worth of miscellaneous hardware; no specifications were given, the manufacturer being simply requested to send along what he thought would find the easiest sale! Another manufacturer, in the carriage business, received an order for parts amounting to a little less than $100, for which draft was enclosed for £100! The most surprising part of their carelessness however was that they neglected to find new names for themselves. Last year Mr. A., in Buenos Ayres, drew on Mr. B. in Barcelona; this year Mr. B. turns up serenely in Buenos Ayres and draws on Mr. A. in Madrid!

If these enterprising gentlemen really want to be able to retire for life, the State should surely help gratify their wishes to the extent of providing the place for them to retire to.

Successful Conciliation.

The Industrial Disputes Act was invoked during the past month in the case of the differences between the Grand Trunk Railway and its machinists. The workings of this Act, while it is still in an experimental stage, are being watched with close interest. The following letter from Professor Adam Shortt, who was chairman of the Conciliation Board, to the Minister of Labor, will throw some side lights on the way the measure worked in this instance:

"Having sent in my formal report on the settlement of the dispute between the Grand Trunk Railway and the machinists, I thought you might be interested in a moderate amount of information as to the nature of the case and the working of the new law with which your name is naturally so closely connected. The matters in dispute covered almost every typical feature of the labor problem, such as rates of wages, hours of employment, including night and day work, overtime, both as hours and pay, classification of men, the number and status of apprentices, the promotion of helpers, improvers, etc., the re-instatement of men on strike or lock-out, some of them for over two years, and the general recognition of the union.

"After opening up the case in a general manner it was thought that if representatives of both sides could get together by themselves, many minor matters in so large a field might be disposed of and facilitate proceedings before the whole board. I considered that the more likely as the officials of the railway, in making reply to the application for a board, declared that the dispute might have been settled if the men had not been so impatient.

"However, after half a day's conference it was found that no progress had been made, hence every point at issue had to be taken up by the board. I appear to have been fortunate enough to secure the confidence of both parties to the dispute, and my colleagues, though nominated by the opposite interests, exhibited a spirit of perfect fairness in every respect. Throughout the proceedings no attempt was made to settle differences on the easy but demoralizing principle of "splitting the differences," but every attention was given to deciding every matter on its merits. This appeared to greatly develop mutual confidence and matters became easier the further we advanced, until it was evident a final settlement was merely a question of patiently covering the whole field. The admirable tact and evident fairness of Mr. Hays, on the side of the Grand Trunk, and the fine spirit shown by Mr. Lee, counsel for the machinists, were conspicuous in propagating mutual confidence and bringing the respective forces into a spirit of accommodation.

"An important and complex labor dispute, involving feuds of more than two years standing and not improving with age, had been settled to the satisfaction of both parties without the loss of a day's work to the men, or a dollar to the company, and above all without disturbance to the public service. Thus was every object of the Lemieux Act secured."

The Use of Peat.

In converting peat into fuel the great difficulty has been to extract from it the large quantity of water that it contains. It has been this which has hitherto prevented the utilization of a widely distributed and cheap fuel. In order that the latest ideas may be brought to bear on the subject the Government of Canada have sent an engineer to Europe to collect information. The industry is well advanced in several European countries, notably Holland, Norway, Sweden, Denmark, Finland and Germany. The Canadian representative will make a study of the plants in operation, and will investigate the methods of working peat bogs, the machinery used, cost of production, and subsequent treatment of the peat in turning it into briquettes for fuel. On his return Mr. Nystrom will act as Government expert on peat, and will render general assistance to manufacturers of peat fuel. His report is expected some time next Fall.

Foreign Representatives in South Africa.

The Canadian Commercial Agent in South Africa has reported to the Department on the subject of farm implements in that colony. His report reads:—

"Nearly all the Canadian manufacturers of agricultural implements believe that it is only necessary for them to send circulars and prints of their implements in order to introduce them into South Africa. On the other hand, during a recent journey to Bloomfontein, Durban and East London, I came across practical representatives of German and United States agricultural implements manufacturers, who were engaged in personally explaining the advantages and conveniences of the implements which they were endeavoring to sell. This places the Canadian manufacturers of agricultural implements at a disadvantage.

"I do not know that it is necessary to enlarge upon the subject matter other than to say, that if Canadian manufacturers of agricultural implements desire to see their goods introduced into South Africa they must make arrangements for an occasional visit to this country of practical and experienced machinists or commissioners to assist in presenting to the farming population of this country the advantages claimed for their respective implements.

"The introduction of modern agricultural machinery into South Africa is in its infancy. Representatives of German and United States manufacturers see the importance of having expert canvassers to personally interview prospective purchasers. Under these circumstances they will certainly gain not only temporary but a permanent advantage over Canadian competitors. I am quite assured that there will be during the next few years a very extensive demand for modern agricultural machinery here."

The Canadian Sewer Pipe Co. is establishing a plant at Medicine Hat.

Manufacture and Properties of Malleable Iron.

By S. B. CHADSEY, B.A.Sc., Metallurgist, International Harvester Company, Hamilton.

THE material regularly known in commercial circles as malleable iron is more accurately, though less conveniently, described as malleableized cast iron, and may be defined as a cast iron of a special composition which has been rendered soft and malleable by a more or less prolonged heat treatment or annealing. There are branches of engineering and manufacture in which it is rarely met with, while in other lines it constitutes one of the most important materials of construction, and is so largely used that upon its quality depend the usefulness and reliability of the structures of which it forms a part. One of the most interesting of metallurgical products, both from the curious transformations which it undergoes during the processes of manufacture and from its numerous applications to mechanical construction, it is strange that so little information concerning it exists in the technical literature of the day. This is largely due, however, to the great reluctance of the older founders to the dissemination of information regarding it, and it is only during recent years that a change has taken



Plate 1. Bending of ½-inch Round Test Bars.

place in this respect, and that it has come to be more generally recognized that greater publicity alone will bring about many desired improvements.

The foundations of the manufacture of malleable iron were laid by discoveries of Reamur about 1720, who found that iron castings that were too hard to be worked could be greatly softened by packing them in iron ore or hammer slag and exposing them to high temperature for a number of days. The industry was not founded in America, however, until 1826, when Seth Boyden of Newark, N. J., started a foundry for the production of harness hardware and other castings of small size. Since that time it has grown to very large proportions, and the uses of the material have greatly extended, until at the present time its foundries are engaged in turning out castings varying in weight from a few ounces to several hundred pounds, and adapted to as wide a variety of requirements. It would be impossible to enumerate a list of the uses to which it is put, but it may be stated in a general way that it enters very largely into the construction of many lines of machinery, of which agricultural implements may be taken as a type. It is also extensively used in the building of railway cars, and it is only recently that steel has been substituted for malleable iron in car couplings.

Advantages of Malleable Iron.

The value of malleable iron as a material of construction lies in certain special properties which are in a sense intermediate between those of ordinary gray cast iron on the one hand and mild steel on the other. Its most valuable properties are the readiness with which it may be machined, a fairly high strength under tensile strain, a considerable degree of ductility, and a consequent ability to withstand impact strains under working conditions. It may be readily bent, and castings may, therefore, be adapted without difficulty to the positions in which they are to be used. In these respects malleable iron is undoubtedly inferior to mild steel and steel castings are, therefore, in demand for uses in which the conditions are more severe, as for example, in the case of the car couplings already cited. But the difficulties attendant upon making them, and the consequent higher cost of their production limits their application to situations

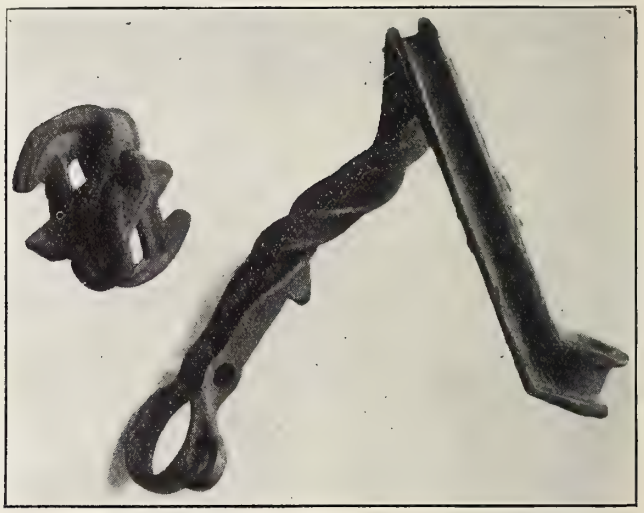


Plate 2. Illustrating Malleability of Finished Castings.

where higher strength is of the utmost importance. Ordinary gray cast iron on the other hand, while it is cheaper than malleable iron, and while it is admirably adapted for use under compression, is incapable of withstanding severe shock, will not bend, and is unsuited to working under tensile strain.

Some Comparisons.

For the purpose of illustration there is given in Table 1 a statement of the ductility and tensile strength per square inch of gray iron, malleable iron and mild steel castings, which serves to show the intermediate position of malleable iron.

Table No. 1.

Material.	Tensile Strength lbs. per sq. inch.	Ductility.
Gray iron	20,000 to 30,000	.25 to 75% in 4"
Malleable iron	40,000 to 50,000	2.50 to 10% in 4"
Mild steel castings ..	60,000 to 70,000	20.00 to 25% in 8"

In regular commercial work it is not usual to meet malleable iron that exceeds 50,000 pounds per square inch in tensile strength, but the writer has met specimens, in the

form of round test bars ½-inch diameter, having a strength of over 58,000 pounds and capable of 15 per cent. of elongation in a length of 4 inches. Such material may be very greatly deformed without being broken as may be seen in Plate No. 1. In this are shown two round test bars of ½-inch section, which have been bent by hammering as much as they would stand without breaking. One of the specimens represents iron of unusual excellence, while the other, although well suited to all uses for which malleable is applied, is of a more ordinary quality. Before proceeding to a description of the method of manufacture it may be of interest to quote from the Standard American Specifications for Malleable Iron, which were adopted in 1904 by the American Society for Testing Materials, and which may be considered as representing good average practice.

TENSILE TEST.—The tensile strength of a standard test bar (1 inch square) for castings under specification shall not be less than 40,000 pounds per square inch. The elongation measured in 2 inches shall not be less than 2½ per cent.

TRANSVERSE TEST.—The transverse test of a standard test bar on supports 12 inches apart, pressure being applied at the centre, shall not be less than 3,000 pounds, deflection being at least ½-inch.

These are requirements that can be readily met in any well regulated foundry, and it is probable that by far the largest part of the castings made at the present time are of a quality superior to that laid down in the foregoing requirements.

How It Is Produced.

Turning now to the methods of production, we have the three main sub-divisions of melting, casting and annealing, but as the second has the least effect upon the quality of the metal, we will omit it from consideration, and will deal only with the processes of melting and annealing.

Melting may be carried out in the cupola, the open hearth furnace, or the reverberatory air furnace, and each of these is in actual use in present day foundries. Owing, however, to the somewhat poorer quality of the material turned out by the cupola, and the difficulty of economical manipulation of the open hearth furnace in malleable work, by far the largest tonnage is melted in the air furnace, to which alone we will make reference.

Melting by Air Furnace.

The special form of the air furnace varies according to the conditions of the foundry, but there is a general agreement with regard to the main features of construction. The hearth of the furnace is separated from the fire box at one end and the entrance to the stack at the other by bridge-walls of suitable height. The roof of the furnace is usually made up of detachable bungs which may be readily removed for repair, or to permit the charging of furnace from above. There is usually a forced draft below the grate of the fire-box, and means for distributing a blast of air into the flame just as it enters the hearth over the front bridge wall. Long flame bituminous coal of low sulphur content is the fuel usually employed, and by suitable stoking and air regulation the furnace may be filled with flame of either an oxidizing or reducing nature. The regulation of the flame is one of the most important matters in connection with air furnace practice, since upon it depends both the economy of the melting and the quality of the metal produced.

The charge for each melt varies in amount within fairly wide limits, but 8 to 10 tons represents perhaps the average practice. The making up of the charge is a matter requiring experience and care, as disastrous results may attend the use of material of unsuitable quality. At the present time it is almost universally the custom to regulate the composition of the charge by means of chemical analysis, and the composition of the pig iron and foundry scrap are kept within fairly well defined limits. The elements that are present in commercial iron, and that are kept under special control are silicon, sulphur, phosphorus, manganese and carbon, and although it is beyond the scope of this article to enter minutely into the question of the influence of these elements upon the quality of the metal, the general specifications for pig iron that are given in Table 2 indicate the customary limits that are set for this material.

Table No. 2.

Silicon	1.00 to	2.00 per cent.
Sulphur	Not above	.05 per cent.
Phosphorus	Not above	.20 per cent.
Manganese	.40 to	.60 per cent.
Total carbon	3.25 to	4.00 per cent.

The furnace charge is ordinarily made up of 50 to 60 per cent. of pig iron and 40 to 50 per cent. of foundry scrap consisting of sprues, gates and defective castings. A small percentage of steel also is frequently used for the purpose of increasing the strength of the iron, or to bring the carbon

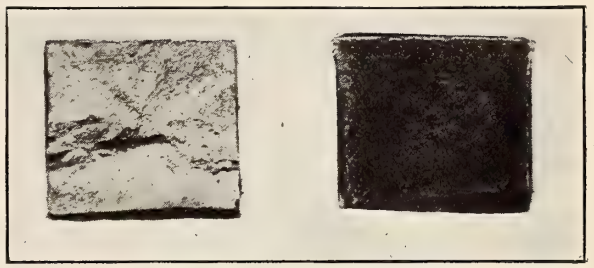


Plate 3. Fracture of Malleable Iron, before and after the Anneal.

of a tardy heat to the proper state of combination. The chemical composition of the various pig irons, and of the foundry scrap being known the composition of the charge is estimated upon the basis of the weights of each iron entering the charge. In Table 3 are given the weights of various materials making up a one ton charge together with the calculated analysis of the mixture and the actual analysis of the product.

Table No. 3.

Iron.		Quantity Per Ton.	Analysis. Silicon.	Sulphur.	Phosphorus.	Managanese.
Pig iron—Car No.	56474	100 lbs.	1.56	.022	.26	.64
" "	5225	200 lbs.	1.70	.035	.08	.42
" "	9378	200 lbs.	1.86	.035	.16	.69
" "	1656	200 lbs.	2.24	.032	.14	.72
" "	17530	350 lbs.	1.05	.049	.16	.61
Sprue and scrap		950 lbs.	1.00	.066	.16	.25
		2,000 lbs.				

Calculated Analysis of Charge.		Actual Analysis of White Iron.	
Silicon	1.31	Silicon	.98
Sulphur	.048	Sulphur	.053
Phosphorus	.155	Phosphorus	.157
Manganese	.44	Manganese	.25
Total carbon	3.20	Total carbon	2.45

A comparison of the percentage of the various elements in the original charge, with the percentage of those elements in the product of the melt, will serve to illustrate the changes that take place in the composition of the metal during the course of the melt. Silicon, manganese and carbon are very considerably reduced, sulphur is somewhat increased, while phosphorus remains practically constant. The extent of the reduction of silicon and carbon is dependent upon the regulation of the flame, and the duration of the melt, and it is most important that the reduction shall not proceed too far. If the proper precautions are not taken the carbon, the percentage of which greatly influences the melting point of the metal, will be reduced to such an extent that the heat of the air furnace will not be high enough to maintain it in a sufficiently fluid condition to pour into moulds. Moreover an iron with too low a carbon content cannot be successfully



Plate 4.
Taking Temperatureof Annealing Ovens with Le Chatelier Pyrometer

annealed, and will remain in too brittle a condition for satisfactory use. The lower limit of the carbon for successful results has been variously stated, an eminent American authority placing it as high as 2.75 per cent., but it has been the experience of the writer that it may run as low as 2.10 per cent. without serious injury to the product.

The Effect of the Melt.

At the termination of the melt, which ordinarily requires from 3 to 4 hours, the metal has been sufficiently refined by the action of the flame to have its carbon almost entirely in the combined condition after it has cooled in the mould. By this is meant that the carbon is united chemically with the iron and cannot be detected in the fracture as it may in the case of gray iron whose dark color is due to carbon separated from the iron and existing in the form of graphite. The fracture of the air furnace iron is markedly crystalline and is technically known as "white" in distinction to the ordinary gray fracture of cast iron. In Plate 3 there is shown the crystalline fracture of a white iron test bar after it has been annealed. The chemical composition of the white iron varies somewhat in accordance with the class of castings that are being made, principally with respect to the silicon content. This element may be as low as 0.45 per cent. in castings of heavy section, and as high as 1.00 per cent. in castings of lighter weight. Sulphur should be kept as low as possible, the usual limit set being 0.06 per cent. Phosphorus may be allowed to run to 0.20 per cent, but better results can be obtained if it does not rise above 0.16 per cent. Very small percentages of sulphur and phosphorus profoundly influence the annealing qualities of the iron, and an excess of either may entirely prevent the anneal from being effective.

The Anneal.

After the castings have been cleaned from adherent sand they are placed in white iron saggers or pits of convenient size, and the spaces between them filled in by a packing consisting of rolling mill scale, slag, iron turnings and other similar material. The purpose of the packing is merely to prevent the hot gases of the annealing ovens from playing directly upon the castings and not, as was formerly supposed, to supply oxygen for the decarbonization of the iron. Any material may, therefore, be used which is sufficiently cheap, is economical to handle and will readily conduct the heat to the castings. The pots having been filled are transferred to the annealing ovens which are rectangular chambers equipped for continuous firing and provided with the draft flues necessary to the even distribution of the heat throughout the entire space. Various fuels are used, oil, gas, lump or powdered coal, and good results may be obtained with any of them if they are burned to advantage.

The duration of the annealing process depends upon the size of the castings and the degree of excellence required, but it may be considered as averaging one week from the closing of the ovens to the discharging of the iron. The actual period of firing is usually from 90 to 100 hours, and is required by standard specifications to continue fully 60 hours after the annealing temperature has been attained. During the early portion of the anneal the temperature is raised as rapidly as possible without overheating any part of the oven, and when the full annealing heat has been attained the fires are so regulated as to maintain that temperature as uniformly as possible until the end of the firing period. In the majority of foundries the temperature is estimated by observing the color of the ovens, but since the development of pyrometers suitable for high temperature measurements there has been a growing tendency toward their adoption, and the consequent substitution of the more accurate method of regulation for one which depends for its success upon the individual judgment of the oven tender. (See Plate 4.) At the end of the firing period the dampers of the ovens, as well as all other openings, are closed in order to permit of a very gradual cooling of the iron. If this is not done and the castings are allowed to be cooled too rapidly, they are liable to be rendered hard and brittle with little indication of malleability. When the cooling has proceeded so far that the ovens are only black hot the doors are opened and the contents removed as required.

The actual temperature which has been found most suitable for the anneal is from 1500° to 1600° Fahrenheit, although the necessary changes in the white iron begin at about 1250° Fahr. The temperature conditions of the pro-

cess may be represented by a curve showing the sharp rise at the beginning to about 1500°, a fairly uniform portion between 1500° and °1600 and a gradual decline t 500° or 600°. (See Plate 5.)

A Remarkable Transformation.

Turning our attention to the condition of the metal after the anneal, we find that it has undergone a most remarkable transformation. The brittleness of the white iron has been exchanged for a characteristic softness and malleability, the fracture has become black and the crystalline appearance has been lost. These changes are due to or at all events are accompanied by a transformation in the condition of the carbon. In the white iron it has been pointed out that the carbon is almost entirely in chemical combination with the iron much as it is in the case of steel. During the anneal, however, this state of combination is broken down, the carbon becomes separated, and appears in a very fine state of sub-division between the grains of the metal. It is this separated carbon which is the cause of the color of the fracture, and its appearance is a condition of a material of satisfactory character. It is, therefore, customary to judge malleable iron partly by the appearance of the fracture, and it serves under experienced observation as a reliable indication of quality.

This separation of the carbon and the physical transformations which accompany it are the essential features of the anneal, but under regular manufacturing conditions two other changes of a minor character also occur. These are the oxidation and consequent removal of the carbon from the surface of the casting inward, and a gradual absorption of sulphur from the material of the packing and the gases of combustion. The removal of the carbon is due to the nature of the packing, which is composed largely of oxides, and which gives up its oxygen to the carbon at the elevated temperature of the ovens, while the absorption of the sulphur arises from the affinity of the iron for that element under the same conditions. The silicon, phosphorus and manganese remain practically unchanged in quantity whatever modifications may occur in their state of combination.

To illustrate these changes in composition which take place in the annealing oven we give in Table 5, the composition of the white iron, and of samples taken from bars 1 inch square, at the close of the regular anneal. Four samples were taken from the test bar, the first representing the iron of the outer layer, 1-16-inch in depth, and the other samples successive layers, each being nearer the centre of the bar by 1-16-inch than the preceding:—

Table No. 5.

Changes in composition due to annealing.

	Sil.	Sul.	Phos.	Mang.	Total Carbon.	Graphitic Carbon.	Combined. Carbon.
White iron	.75	.045	.175	.144	2.35	0.055	2.295
Annealed iron—1	.75	.070	.177	.145	0.203	0.210	
" " 2	.74	.051	.176	.147	1.460	1.465	
" " 3	.75	.049	.177	.146	2.170	2.165	
" " 4	.76	.049	.175	.145	2.240	2.230	

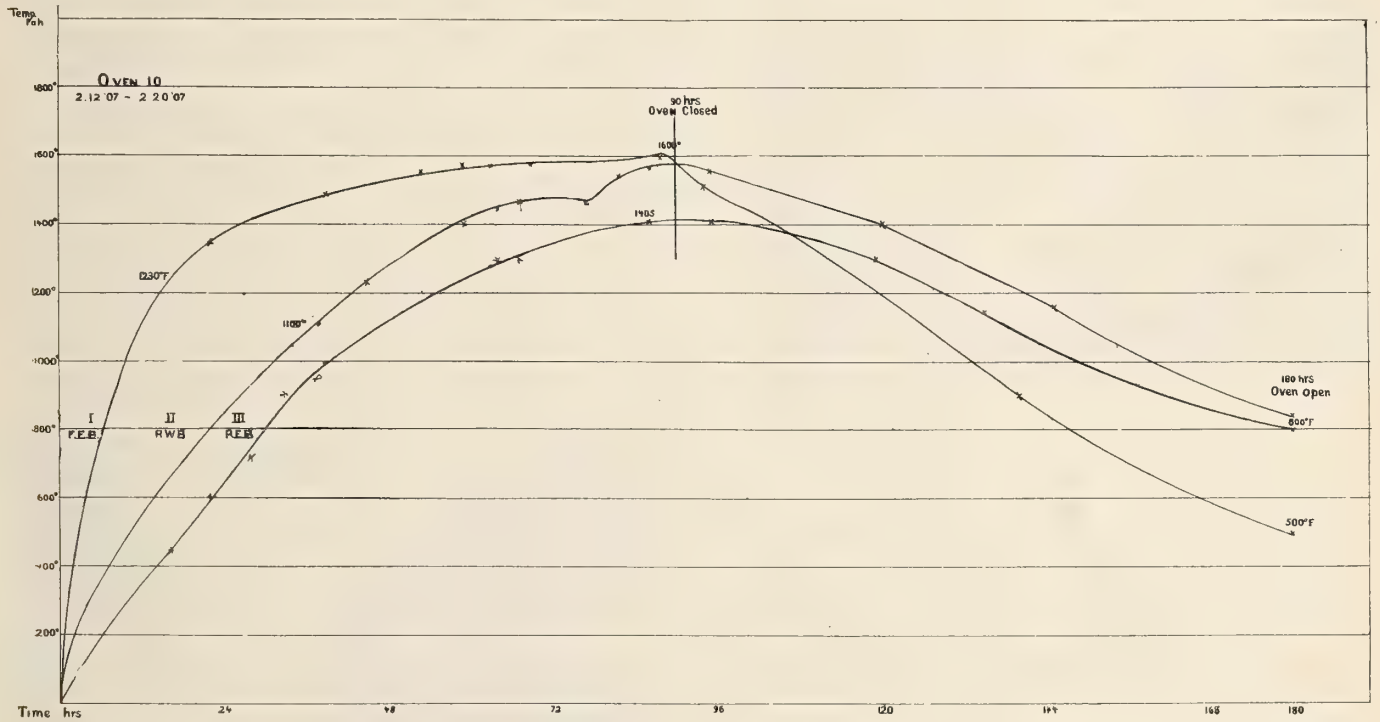


Plate 5. Curve showing Annealing Oven Temperature.

It has been found possible to repeatedly anneal malleable iron without injuring it, the only important change after the first anneal being the gradual reduction of the carbon. Unless an excessive temperature is reached the quality seems to undergo neither deterioration nor improvement by greatly extending the period of the anneal.

One result of the establishment of the new Canadian-Mexican steamboat service on the Pacific has been the appointment of a permanent Mexican Consul at Vancouver. Arrangements have been made for working in concert with the new inter-oceanic railway and the steamship lines from Europe coming to Tehuantepec. It is believed that an extensive through business will be done by means of the new routes.

TRADE WITH WEST INDIES AND BRITISH GUIANA.

Mr. H. B. SCHOFIELD on Trade Possibilities.

A CLOSE study of the existing condition of trade in the West Indies and British Guiana reveals many features interesting to Canadian manufacturers, exporters and handlers of food products of all kinds. The comparatively small number of Canadian houses that seek direct trade relations in these parts, must convince one of two things—either they have so little to sell them that they will not bother, or having spasmodically attempted to do it, without systematically canvassing either by means of their own salesman or through resident commission houses, and perhaps making a loss, they have abandoned it.



A Business Street of Demerara.

The United States on the other hand, seem to enthusiastically seek it. The New York houses who canvass there, do so as if they meant to get the business. They study the details, and when they have discovered what is wanted, they go one better, so to speak. In brief they are enterprising in a way that appeals to buyers. Of course, apart from this, New York has the advantage of great wealth, which means a lot in the way of financial ability to carry large credits on open account. It has also probably better transportation facilities, though after all it is open to doubt, whether the ocean services to the various points are any better than the Canadian service. If the delays that invariably obtain on shipments from inland points in Canada, were overcome, by carrying stock in St. John and Halifax, so that orders could be filled with promptness and dispatch, there would be little heard in criticism of the Canadian subsidized service. Nevertheless it cannot be gainsaid that a weekly sailing of these boats from Halifax would inevitably attract the West Indian buyer to the Canadian market, and then if the goods he wanted were stocked at the seaboard and shipped by the same steamer that brought the order, there would be little advantage left to New York, except the natural one of the possession of a greater variety of merchandise, stocks, and the ability to carry larger credits, and these could gradually be overcome, or partially so at least, by determined effort. That many Canadian products find their way to these West Indian markets through New York, is a well-known fact, and one that Canada should be as eager to overcome, and carry for herself as she is to transport her trans-Atlantic trade.

The extension of the British preferential tariff to Canada is only a question of time, and already the principle has been adopted unanimously in the Legislature of the Leeward Island. Is this not, therefore, the time for Canada to put forth her best effort to secure some of this trade, that full advantage may be taken of any preference extended to us in conjunction with other parts of the Empire? The air is full of Imperialism, and one, if not the strongest feature of that doctrine is closer trade relations within the Empire. If political union between the Dominion, the West Indies and British Guiana is at present a greater burden than Canada can assume, surely everything should be done to develop and foster our trade with these tropical possessions of the Empire, which are the natural complement of our northern zone, and without question, must be of inestimable value to this country, when our consumption of their products is many times greater than to-day. The Mother Country can materially assist in this work, by at least hindering in no way the adoption of a preferential tariff, and by assisting to maintain a better mail service, and a better system of cable, passenger, and freight communication between these various West Indian ports, the port of Georgetown, Demarara, the Dominion and Great Britain.

Let us then keep these points clearly before our minds:

1. Better transportation.
2. Seaboard facilities for prompt transaction of business.
3. Better parcel post service.
4. Reciprocal preferential tariffs.



Avenue of Cabbage Palms, Georgetown.

Who is there amongst us that is not an Imperialist in the sense that he wishes to bind together and build up, and strengthen in every possible way our great Empire, all the while keenly alive to the spirit of true Canadian nationalism within that Empire? Even could one Canadian be found, desirous of disrupting the Empire, he must still favor any effort to improve our trade connection with so important a country as these tropical possessions. Such visits as that of the recent Board of Trade delegation, can accomplish much along these lines, and should be interchanged annually. The report of this delegation will shortly be published, and for detailed information it is herewith recommended to all persons interested in this question.

WHAT IS THE CHEAPEST POWER?

MR. C. BERMINGHAM Discusses the Important Problem.

FROM time to time articles have appeared in INDUSTRIAL CANADA on the power question as it affects Canadian manufacturers. The developments at Niagara Falls have been such as to revolutionize popular ideas on this all-important work. When the figures of the Hydro-Electric Commission appeared they were at first received with open incredulity. The estimated cost of power was so low as to suggest some pitfall which must have been overlooked in making up the figures. However, what was formerly received with hesitation is now accepted as a certainty.

Still, the search for cheap power goes on with undiminished zeal. The possibilities of producer gas as a source of power began to receive attention, and unexpectedly favorable results were attained. Thus, the question of power, the correct solution of which spells industrial success, continues to be examined. The observations of Mr. C. Bermingham, of the Canadian Locomotive Co., Kingston, which are given below, will be read with interest. They sum up the results of very careful personal investigations into the subject.

Some Personal Investigations.

SOME time ago, having in view the supplying of power for our shops, we made an investigation into the subject, both here and elsewhere. We looked into the practicability of utilizing the nearest water powers, viz., those at the Trent, Mississippi, and at Waddington, N.Y., thinking we might organize a transmission company, and bring power from one of these sources to supply our own and other local needs, as well as those of the municipalities through which the line might pass. The result of this investigation was that we concluded it would cost, after making due allowance for interest, sinking fund, maintenance, and protection of transmission lines, etc., at least $20 per horse-power per annum to deliver power in Kingston from any of these sources.

Inasmuch as our, and nearly all other local requirements, were for only a ten-hour day, we naturally sought in other directions to see if we could not procure a horse-power for a year of three hundred working days at a less figure. We had not gone very far with our enquiries before we were attracted by the improvements recently effected by the makers of gas producers and gas engines, and the remarkable results they were achieving.

Cost of Producer Gas.

We accumulated a great deal of data, which I will not burden you with now, suffice it to say we received a number of proposals from perfectly reliable firms guaranteeing to produce power at a consumption of anthracite pea coal not to exceed one pound per brake horse-power. Some firms guaranteed better results, viz., three-quarters of a pound. Assuming that one pound would be a safe basis of calculation, and that anthracite pea coal would cost $5 per ton, delivered in power house here (as a matter of fact we are buying it for considerably less), and figuring on a ten-hour day, we have a cost for 300 working days of $7.50 per B.H.P. for fuel. To this we must add cost of operation, repairs, interest on investment, depreciation, etc., which the builders of these producers and engines claim is more than covered at $2.50 per horse-power per annum, but to be perfectly safe, and allowing for all contingencies we added $5 to cover these items, and thus, roughly figured, the cost of one B. horse-power for 300 working days of ten hours each to be $12.50, and I am sure that this is over rather than under the mark.

Understand, in generating power in this way one is not confined to anthracite pea coal; bituminous, or, for that matter, any other fuel may be used. There are producers making power gas in a practical way from peat, and even sawdust, but the quantity consumed goes up in about the same ratio as the cost of the fuel comes down, so the result is about the same, and anthracite pea, charcoal or coke seems to give best results in all "suction producers." This style of producer seems to possess several advantages for small and even moderately large powers. Until a comparatively recent date suction gas producers were not used for much over 100 horse-power, but recently some moderately large plants have been installed, and I had the pleasure of inspecting one of these at Scheviningen, Holland. This was a central station for lighting and street car power, and at the time of my visit there was some 2,000 horse-power being developed, which, I understand, has since been increased to 3,000. The plant consisted of Pintsch gas producers and Nurenberg engines, and was installed under a guarantee of three-quarters of a pound of Welsh coal per B. horse-power. The works were in charge of an English superintendent, and that gentleman assured me that the results were even better than the guarantee.

Results in England.

I understand, however, that for very large powers the Mond system of producing gas, where sulphate of ammonia is obtained as a by-product, will give very much more economical results. I have before me a catalogue of the Power Gas Corporation, of Stockton-on-Tees, England, in which is published a statement of the annual working cost of a 20,000 horse-power plant, with ammonia recovery, working continuously on full load for 365 days of twenty-four hours, with coal at 8s. per ton, showing a cost per indicated horse-power for one year of 19s. 8d. If we add 50 per cent. to these figures to allow for the difference in cost of coal, you can see we are very much under any water power proposition where the current has to be carried over long transmission lines. As the Mond process involves a rather large investment, and cannot be worked to its maximum economy in less than 20,000 horse-power units, we did not investigate it very closely, but I am of opinion that the City of Toronto could erect a plant, consisting of a Mond producer and modern gas engines, and supply its citizens with power at a price considerably less than that at which it can be brought from Niagara, and make a good profit on the transaction.

The Subject Complex.

In view of the above you will naturally feel some surprise when I tell you that we did not adopt gas power after all, but that we are now engaged in putting up the most modern and up-to-date steam plant that we can possibly secure. The reason for our passing the gas proposition was not from any lack of faith in it, but simply because the question was complicated by the problem of heating our shops during six long months. For this purpose the gas engine exhausts are of very little service, whilst the exhaust steam can be used to great advantage. Although it will

cost us more to generate power from steam, even under most modern improved conditions than it would from gas, yet when we deduct from the cost of the power the value of the steam used for heating purposes, it will almost, if not quite, compensate for the increased cost of the power itself.

When the Hon. Adam Beck visited Kingston he said in substance that the Hydro-Electric Commission would furnish this municipality with power at a price which would allow it to be sold to the consumer at somewhere about $26 or $28 per horse-power per annum. If we were taking power on the basis of Mr. Beck's proposal we would still have to heat our buildings by steam, and also maintain a plant to run our shops in cases of accident to the transmission lines; so under the circumstances we are doing very much better in generating our power on our own premises. I believe I am perfectly safe in saying that, for this locality at least, or for any locality where similar rates prevail, and where coal may be had at $5 per ton or under, it will not pay any users of power operating only ten hours per day to accept Mr. Beck's proposal.

CAST THREAD FITTINGS.

By Henry B. Cutter, at meeting of American Foundrymen's Association.

The principle and method of making gray iron castings with threads cast in them was evolved by George Cowing, of Cleveland, about 1878. The development of such castings was coincident with that of the pump industry, in which Cowing & Co., Seneca Falls, N.Y., were leading factors. This method was applied to the manufacture of pumps where different parts were to be screwed together, and was employed exclusively by this company from its inception to the practical abandonment of the business. It was found to be a marked point of economy in manufacture. While originally applied as stated, since the organization of the Cast Thread Fitting & Foundry Company the idea of making grey iron fittings with cast threads has been carried to a much higher degree of perfection than had previously been thought possible, both as to quality and economy in methods of production.

Recent tests with a number of these fittings screwed together with wrought iron pipe having standard gauge cut threads, the joints being made up without the use of any dope other than lubricating oil, showed no indication of break down under a pressure of 900 lb. to the square inch.

Erroneous opinions have existed among foundrymen regarding this method. It has been considered by many that it involved the use of chills, thereby producing a hard, brittle thread which would be liable to break in making up. This, however, has not been the case. The method pursued has been the use of seamless sand cores formed without the fin or rib that is usually caused by the sections of a core box and which requires dressing off. The threads of these seamless cores are formed in the sand by the use of special devices. The dies of the thread forming devices are made of high grade steel and are subjected to a minimum amount of wear. When once made to standard gauge they will produce duplicate thousands of these seamless thread cores without variation, and perfectly round.

The seamless thread cores are then joined with the ordinary plain or body cores by the use of arbors, and are placed in the mould the same as ordinary cores. The special mixture and the fineness of the sand from which these thread cores are made, produce a clean sharp thread in the casting. The methods employed in uniting the thread cores with the plain cores are such, under improvements recently put into operation, as to render it impossible for the threads in the castings, where they come at opposite ends of the fitting, to be out of alignment.

It has been claimed that the contraction of the metal from the time it is poured into the mould until the cooling of the casting would produce sufficient shrinkage to render the making of cast threads unreliable and variable. Such a condition, however, does not exist in practice, and is perhaps due to the fact that the solid core prevents a shrinkage which might otherwise occur. The metal in the threads of castings thus made is of the same structure as that in the body of the casting, only having on the surface of the thread a thin film, present on all gray iron castings. This film proves to be of great benefit in practice, as it is harder than metal where the film is cut away, as is the case with standard threads cut on pipe. This cast thread being standard, true to gauge, and possessing the hard film of the casting, forces the cut thread of the pipe into a perfect union.

Regarding the iron used, ordinary foundry practice is pursued. The exercise of care in the mixture of the iron and the use of analysis produce clean, sharp threads.

A Valuable Invention.

It is said by the use of the apparatus of Professor Grihant that the presence of fire damp in the air of a mine may be determined even when the gas is present in the atmosphere in so small a proportion as 1-200 of 1 per cent. The invention is simple in construction and easy to understand. It consists of a column of metal, supporting above a cup and below a rod, connected with an electric current. Between the little inverted cup at the top and the rod below is placed a graduated tube, bell shaped, into which is introduced the gas for analysis.

Experimenting with his invention before spectators, Professor Grihant demonstrated, by a very simple calculation, that the explosive mixture used in his test contained 5 volumes of fire damp for 15 volumes of oxygen, and 30 volumes of air, which had been introduced to moderate the effects of a too violent explosion. The gas serving for this analysis was 10 per cent. Professor Grihant experimented a second time with gas at 4 per cent. and, although reaching his conclusions by a slightly different method, arrived at equally convincing and exactly similar results as at first.

By the invention it will thus be easy to determine the presence in the air of a mine the existence of fire damp in small quantities before it becomes dangerous.

A Partner Wanted for Agency Business.

A well established commission merchant in St. John's, Newfoundland, writes the Association that he is prepared to make an exceptionally favourable partnership agreement with an energetic young Canadian, who has a good connection among the manufacturers. Our correspondent states that it is a matter of notoriety in Newfoundland that an outsider can sell goods to local merchants when a native cannot Americans are making a strong bid for the trade, and have travellers constantly on the ground. There is a strong sentiment, however, in favour of Canada, a sentiment which is being fostered by Confederation talk, and the time seems opportune for a few bright and enterprising young Canadians to establish themselves in a prosperous business. Interested parties are invited to communicate with the secretary of the C.M.A., Traders Bank Building, Toronto.

FOREIGN TRADE NOTES.

How to Quote Prices.

Some practical pointers for Canadian exporters are made by Mr. P. B. McNamara, of Manchester, to the Canadian Department of Trade and Commerce:—

"It would be well for Canadian manufacturers to quote also the sterling price, the equivalent of the price in currency, to intending buyers in England, and thus remove any feature of doubt as to cost in their minds. It not infrequently happens that competition in the lines under consideration is very keen, and a small difference in the cost may prejudice the sale. The fluctuations in sterling exchange are slight, and if the value of the £ is computed at $4.866 or fractions thereof on this basis, it would simplify matters. I was called on recently by a member of a firm to confirm his computation of currency prices into sterling, before he would give an order for a carload."

"Another matter of importance is quoting c.i.f. Manchester or Liverpool as required, as the belief prevails that the Canadian shipper can obtain cost of freight insurance and charges more easily than the buyer here, and to some extent it is felt to be part of his business to do so. I can safely say that much time would be saved, and orders more likely secured if this plan is adopted."

Might Sell Furniture in England.

A possible opening for an export furniture trade is suggested by a report from the Canadian Commercial Agent in Manchester: "A combine has of late been formed amongst the Austrian bent-wood manufacturers, who have a large trade in England in all articles of furniture of this class, and in consequence they have advanced the prices materially. The trade here naturally resent this, and suggest that Canadian manufacturers should take advantage of it, and push their sales with greater vigour. Nothing tends more to loosen the conservative dealings of British firms than a concerted attack upon their profits. It is admitted that Canadian furniture of this class is not deficient in style or strength to the Austrian, but that it lacks the fine polish of the latter, ascribed to the varnish used containing resin. This indifferent finish is said to apply to other articles, and it cannot be insisted too strongly that the manufacturers interested in export trade should endeavor to finish all articles for this market fully equal to the Continental. At the present time there is a good demand for wood bedsteads in any of the hard woods Canada is so abundantly favored with, and the market here only needs careful cultivation to enable the Canadian manufacturer to increase his output."

Beds for Mexico.

A market is reported in Mexico for metal beds, springs and bedding. At present the only two countries which are selling these lines of goods there are the United States and England. The latter controls the higher priced goods and the former the lower qualities. Little active work is being done to increase this trade by the two countries now interested, and in view of our special advantages in the market we should be able to get a share of what is going.

Tax on Containers.

Some recent changes in the customs regulations are said to be the cause of considerable dissatisfaction on the part of importers and friction with the customs officials, objection being taken to the exaction of duties on freight charges in addition to invoice prices to port of shipment to Newfoundland, writes Mr. E. D. Arnaud.

The following particulars in regard to the duties on packages will be found useful to Canadian exporters:—

Tax on Packages.

Cases costing at port of export over 2s. and up to 4s. shall be valued at	$0 40
Costing 10s. and under	0 50
Costing 15s. and under	0 60
Costing 20s. and under	0 70
Costing 25s. and under	0 80
Costing over 25s. and under	0 90

Taxes for Bales.

Coverings such as bailing, including hooping or cording, in which dutiable goods are contained, when not included in the cost of the goods, costing at the port of export 5s. and under, shall be valued at	$0 50
Costing 10s. and under	0 60
Costing 15s. and under	0 70
Costing 20s. and under	0 80
Costing over 25s.	0 90

Straw wrappings, when used as outside coverings on dutiable goods, and when not included in the cost of the goods, shall be valued at half cost at the port of export.

Crates, in which earthenware is packed (including straw) shall be valued at one-fourth their cost at the port of export.

Wet Goods Packages.

In making entry for goods, the coverings inclosing which being dutiable, the value for coverings shall be as follows:—

Carboys containing acids	each			$1 00
Puncheons	"			1 50
Hogsheads	"			1 50
Half hogsheads (ale or beer)	"			0 75
Quarter casks	"			1 00
Octaves and barrels	"			0 60
Half octaves	"			0 40
Quarter octaves	"			0 30
Bottles—ale, beer and porter, quarts	per dozen			0 20
Bottles—ale, beer and porter, pints	"			0 10
Bottles—brandy, whisky, etc.	"			0 20
Flasks—no cups	per case of	2	dozen	0 40
Flasks—no cups	"	4	"	0 80
Flasks—with cups	"	2	"	0 60
Flasks—with cups	"	4	"	0 70
Decanters	"	1	"	1 00
Bottles—Gin, quarts	"	1	"	0 10
Bottles—wine	per dozen			0 20

TRANSPORTATION.

MISDESCRIPTION OF FREIGHT BY SHIPPERS.

VARIOUS complaints have been made by the Canadian Freight Association from time to time to the effect that some shippers misdescribe their goods, either from ignorance of the classification or from a desire to obtain a lower classification, and, therefore, a lower rate. The transportation companies ask that the attention of manufacturers generally be called to these practices on the part of some shippers, and that, in justice to the railways and to members of the Association who as shippers, take pains to describe their goods in accordance with the proper classification, some mention be made of these irregularities.

It is stated that not only is it the practice to misdescribe freight, but some shippers systematically misrepresent the weight of their goods. The Canadian Freight Association employ inspectors for the purpose of detecting such misrepresentation, but the force is not sufficient to prevent a great deal of traffic moving at lower rates than should be paid. These inspectors must work so that there will be a minimum of delay to the shipper and the railway, otherwise the shipper would route his goods by some other line and general congestion of freight would result.

A phase of misdescription to which attention is drawn, whilst, perhaps, not illegal, is nevertheless a misrepresentatino inasmuch as the property is insufficiently described. It consists in giving insufficient details of the shipment, so that the agent is unable to classify same properly without causing inspections to be made, thus involving delay and annoyance to the shipper or consignee. Many instances are given by the railways of such lack of information.

To illustrate to what extent these practices affect the legitimate revenue of the transportation companies it might be stated that last year the corrections in weight as the result of weighing (exclusive of live stock and carload traffic weighed over track scales) at four points in Ontario and Quebec where regular freight inspectors are installed, aggregated over 11,000,000 lbs., representing over $28,000 revenue. Corrections in classification for the same period exceeded $25,000.

We believe that it is only necessary to call the attention of manufacturers to the practice, if such exists, to have it discontinued. It must be readily seen that it is an unjust discrimination against the shipper or manufacturer who faithfully and honestly describes his goods, and that it must tend to militate against the best interests of all users of transportation.

As it may not generally be known that the Railway Act expressly prohibits the misrepresentation of freight, the attention of shippers is called to the following sections :

Sections 399 and 400, Chapter 37, R.S.C., 1906.

> "Any company or any officer or agent thereof, or any person acting for or employed by such company, who, by means of false billing, false classification, false report of weight, or by any other device or means, knowingly, wilfully or willingly suffers or permits any person or persons to obtain transportation for goods at less than the required tolls then authorized and in force on the railway of the company, shall for each offence be liable to a penalty not exceeding one thousand dollars and not less than one hundred dollars."
>
> "Any person, or any officer or agent of any incorporated company, who shall deliver goods for transportation to such company, or for whom as consigner or consignee the company shall transport goods, who knowingly or wilfully by false billing, false classification, false weighing, false representation of the contents of the package, or false report of weight, or by any other device or means, whether with or without the consent or connivance of the company, its agent or agents, obtains transportation for such goods at less than the regular tolls then authorized and in force on the railway shall, for every such offence be liable to a penalty not exceeding one thousand dollars and not less than one hundred dollars."
>
> "The Board may make regulations providing that any such person or company shall, in addition to the regular toll, be liable to pay to the company a further toll not exceeding fifty per cent. of the regular charge."
>
> "The company may, and when ordered by the Board shall, open and examine any package, box, case or shipment, for the purpose of ascertaining whether this section has been violated."

RAILWAY EQUIPMENT.

In October 1905 complaints were filed with the Board of Railway Commissioners regarding the shortage of cars and locomotive power on the railways. Orders were issued to the principal lines indicating that it was the intention of the Board to take steps to protect the public interests by requiring the railway companies to provide a reasonably adequate supply of cars and locomotives in order to handle the freight traffic of the country. Since that time complaints have been and are being made by manufacturers and shippers in all parts of the country, of their inability not only to get what cars they require but to get anything like reasonable despatch after shipments are loaded. As a consequence it is impossible to estimate the loss sustained.

The investigations resulting from the orders issued by the Board dated October 25th, 1905, were doubtless sufficiently comprehensive to enable the Board to fully appreciate the situation. Notwithstanding this action the situation grew from bad to worse, and as a result sittings were held at Ottawa on February 5th, 6th, and 7th, 1907, at which the Board asked for information relating to supply of equipment and adoption of methods to insure more prompt and efficient service on the railways ; also as to car supply for traffic originating on short local lines for carriage for long distances over other lines.

A memorandum was issued by the chairman which appeared in the March number of Industrial Canada. The railways were asked to furnish a reply to the enquiry on or before March 15th, 1907. Up to the present time the public have no information as to what the situation is. It is, therefore, hoped that a statement will be made at an early date.

In this connection the "Railroad Gazette" has just published a very comprehensive summary of freight cars in service on the railroads in the United States. This was brought about as a result of the haphazard guess work as

to the number of freight cars in service, and the increase during the year 1906. The tables have been compiled from data contained in the annual reports of the railways. The statement gives the freight equipment owned in 1905 and 1906, the increase or decrease in number of cars in service, and the percentage of change. It also includes columns indicating the character of the traffic on the different roads. The value of such information to the public cannot be overestimated, and if such were forthcoming from our Canadian railways it would be of valuable service to the shipping public generally.

At the present it is not possible to obtain readily the annual reports of the Canadian railways. The information issued by the Department of Railways and Canals so far has been of little service in this respect.

A statement on the above lines from the Railway Commission, backed up by an order along the lines indicated in the memorandum given out by the Chief Commissioner already referred to, would be of inestimable value and would render a service to a long-suffering public.

WEIGHING CARLOAD SHIPMENTS.

It is claimed, and justly so, that a large percentage of the claims presented to the Railway Claims Departments is due to the arbitrary increase in rate or weight, or both, from the original bill of lading while the shipment is in transit. A recent case has been reported as follows : A large manufacturer of implements shipped a car to a point on the Pacific Coast. The weight of the contents of the car was carefully checked when loaded and correctly shown on the shipping bill, the shipper being particularly anxious that the car should reach the consignee with the freight charges in accordance with the advice which had been given him. The car was put over the railway track scales while in transit, and as a result the weight increased 10,000 lbs., and a demand was made upon the consignee for the payment of increased charges before delivery would be made. Accurate weights were given at the initial point on this shipment, yet the weight secured en route by a weigher in the employ of the railway, responsible or irresponsible as the case may be, whose sole object was the interest of his employers, was accepted as the correct one, and collection made accordingly.

The way in which track scales are operated, and the number of proofs which have been submitted of errors in obtaining net weights should be sufficient for the railway to exercise some discretion in insisting upon the absolute accuracy of their weights, especially when they differ from the weights given by thoroughly reliable firms who would not stoop to be a party in any way to fraud ; who deal honestly and expect similar treatment at the hands of the carriers.

Where Wrong Weighing Occurs.

As it is these track scales are handled by different persons, sometimes a regular weigher, other times the operator, then again train hands or switchmen. Cars are run over them without uncoupling or "slackening." One drawbar is higher than another, scales are usually exposed to weather conditions, etc. There are other causes :

First—Mechanical errors, viz., errors arising from the scales themselves, due to flaw in manufacture, careless installation, or improper maintenance.

Second—Incorrect operation, thereby obtaining an indicated weight on the beam which is not the true one.

Third—An incorrect tare weight due to failure to get accurate light weight, or the use of the weight stencilled on the car which may be grossly inaccurate.

Fourth—Errors in copying the weight indicated by the scale beam, by the stenciled weight, by the weighmasters' record, or in other methods wherein a copy is required.

Notwithstanding these chances of errors the weigher is prepared at all times to say and stand by it that his weight is absolutely correct, otherwise in all probability someone else will fill his position.

It is true that government inspection of these scales is required, but that is no guarantee against the chances of errors as outlined.

The position taken by the railways is a most arbitrary one, inasmuch as they relegate to themselves as sole arbiter the right to declare the weight of any shipment, and in consequence a dealer is frequently made to pay according to railway scales for more weight than his customer receives. On the other hand it is not customary for the railways to accept their own track scale weights in purchasing their supplies, which shows that they have not the same confidence in those scales when it comes to their personal interests, no assurance of correctness when the public is concerned.

In some of the United States all cars loaded with freight to be shipped and charged for by the carload must be weighed by a sworn weigher. This would seem to be the correct method of handling these scales, especially in this country where a large percentage of the traffic is sold on the basis of track scale weights. There should be some independent arbitrator to see that justice is done. It is customary in the ordinary course of business, and there is no good reason why the carriers should be permitted to retain to themselves this right without supervision of any kind.

RELATION OF THE RAILWAYS TO THE PUBLIC.

President W. W. Finlay, of the Southern Railway made a speech at a banquet recently tendered him by the citizens of Chattanooga, Tenn. He said in part : "Railroads and their relations to the public have never been so universally discussed as during the past two years. If this discussion leads to a better understanding of existing conditions, and of the interdependence of the railroads and the people, it will be productive of much good." Presidents of other large transportation interests, notably W. C. Brown, of the New York Central, H. Elliott, president of the Northern Pacific, and James J. Hill, of the Great Northern, have come out openly and discussed the present situation with the people, thereby creating a better mutual understanding.

Not so, however, with the Canadian railways. The people are kept in blissful ignorance of the situation other than that from time to time they are confronted with some new phase or regulation arbitrarily created from a railroad view point. How long is this to continue ? Shippers generally recognize the hardships the railways have had to contend with during the past winter and have patiently suffered the loss sustained owing to the total failure of the railways to furnish anything like adequate facilities. The time is now due for the Canadian roads to make some statement, to take the public into their confidence and give some idea of what may be expected. It is almost as difficult to get any information out of the railways as for a camel to pass through the eye of a needle. Really, Messrs. Presidents and General Managers, take us into your confidence. We are as much interested in the welfare of the country as you are, and we believe we should have some say in directing its destinies. Will anyone give us a guarantee that there will not be a repetition next winter of what we have just gone through ? The public have a right to know what they may expect.

EXPRESS COMPANIES.

Now that the express companies are under the control of the Board of Railway Commissioners, and the law relating to express companies does not in general differ from that relating to other common carriers, some improvement in their methods of doing business may be looked for. It has been customary for the express companies to limit their liability by special contract. Furthermore, an additional toll for insurance is charged the shipper on shipments exceeding $50 in value, notwithstanding the fact that as common carriers they are the insurers of the goods.

The Canadian Railways own and control the express companies. Therefore, the net earnings of these companies revert to the railways. The forwarding of parcels and freight on passenger trains is only permitted through these agencies, and the public is forced by the carriers to look to the express companies for such service.

It is stated that the Dominion Government have appointed counsel with the view of making a thorough investigation of the express companies before the Commission approve of the tariffs or classification submitted by them. It is expected that the investigation will not be confined to the tariffs, etc., submitted, but will extend to the different forms and regulations which the companies seek to surround themselves with, in order to relieve themselves of liability as common carriers.

The statement has been made that in view of the compulsory filing of tariffs the express companies have cancelled numerous special rates and concessions which had been in force for years and which will no doubt, if such is the case, prove a hardship, as it is fair to assume that the same conditions will exist after the approval of the tariffs as existed when these concessions were made. This will also bear investigation. In this connection reference is made to the action taken by the State of Missouri, whereby express companies are declared common carriers. The Board regulates classification charges, discrimination is prohibited, all persons and localities must be treated alike.

A ruling of the Board was as follows :

All express rates now in force and operation whether general, special, or otherwise between points in Missouri, lower than the rates named in the maximum schedule and tariff **shall not be increased except on approval of the Board.**

We believe it is in the interest of trade that similar action should be taken by our Board, and that the investigation be not confined to the present but extended back at least a couple of years.

RECIPROCAL DEMURRAGE.

The following States may be said to have reciprocal demurrage laws, using that term in the sense that the carrier is to pay to the shipper for failure to supply cars, for failure to move cars at a specified rate per day, and for other faults by the carrier : Louisiana, Mississippi, Missouri, North Carolina, South Carolina, Texas, Virginia, Indiana, Georgia, Kansas, Minnesota, Wisconsin, and the Territory of Oklahoma.

No recent action seems to have been taken by our authorities, notwithstanding that the Canadian Manufacturers Association, as well as other organizations throughout the country, have made repeated representations to the Board of Railway Commissioners in respect to the same. Two bills were introduced at the last session of the House of Commons, both of them entitled an "act to amend the Railway Act," and intended to provide for reciprocal demurrage, but neither of them got beyond the first reading. If it is so that the Board of Railway Commissioners has not the power at present to enforce reciprocal demurrage so termed, it is to be hoped that the necessary amendment to the Act will be made at the next session of Parliament. A necessary corollary of the right of railways to charge a per diem tax for cars delayed in unloading, is the right of the shipping public to collect a similar fee from the railways for failure to supply cars within a reasonable time. The present arrangement is too jug handled.

TRADE PUBLICATIONS.

The Robb Engineering Company have issued two catalogues on engines and boilers. Besides being very attractively designed and executed, they contain much that is of interest to every user of power. The description of the evolution of the boiler from its earliest type is followed by a lucid and detailed statement of its construction. The advantages of various parts are discussed, and the whole subject of engines and boilers is taken up in full. The booklets are instructive, and should help to introduce the articles described.

A new trade publication has made its appearance under the title of the "Canadian Jewelers' Journal." The first number is attractive in design, and contains a large amount of readable and instructive information. If it keeps up to the standard set in the initial number it will make a place for itself in trade journalism. The paper is published by the Journal Publishing Co., Limited, Hamilton, Ont.

A well-illustrated catalogue has been issued by the Imperial Rattan Company, Limited, of Walkerville. It contains a full description, with specifications and prices, of all the lines manufactured by this company. It will be welcomed by all dealers in these goods.

In response to enquiries for information regarding the care and operation of electric mine locomotives, the Jeffery Manufacturing Co., of Montreal, have issued a bulletin discussing the subject in all its details. The booklet is thoroughly practical, having to do with the locomotives in actual service, and so will be of special interest to mine engineers and managers. It is handsomely illustrated throughout, and is indispensable to those who are interested in such engines.

The Canadian Boomer and Boschert Press Company, Limited, Montreal, have issued a catalogue of their regular line of presses. They point out in the introduction that although the illustrations and descriptions refer only to their regular makes, they also make special presses of any size. The catalogue is very complete, however, in its cuts, descriptions, and comparison of dimensions and should prove interesting to the many people who use presses.

A descriptive catalogue has been received from J. F. B. Vandeleur, Toronto, of Evershed's Patent Bridge Megger. It contains a complete description of the article, with a discussion of its operation, etc. Price lists for various styles are included.

As the summer advances the subject of electric fans becomes more insistent. The Canadian General Electric Co. of Toronto, have anticipated the need with a convincing catalogue, illustrating a line of fans handled by them. The booklet reveals most attractive designs in fans and electroliers. The attractiveness of the fans is added to materially by the artistic style of the catalogue.

BOOKS FOR BUSINESS MEN.

A DECADE OF CIVIC DEVELOPMENT.

PROFESSOR ZEUBLIN, of Chicago, has just issued a review of recent municipal development in the from the University Press, Chicago ($1.35 postpaid), United States. Advances in administrative efficiency are the keynote of this development. Local improvement associations, boards, health regulations, factory legislation, better municipal services, free libraries, better muncipal schools, and generally a more active study of local problems, may be mentioned.

Local government in America is improving as people are growing in prosperity, leisure and culture. This is to be expected, and is one of the hopes for our own new Canadian citizens. No more significant movement can be noted than that for more generous technical education, and internal improvements of various kinds in handsome municipal buildings, parks, boulevards, and streets. The influence on civic architecture of the great world's fair at Chicago in 1893 is credited with a generous allowance.

Another tendency is towards consolidation of adjacent municipalities. Metropolitan Boston is given as an illustration. Intermunicipal consolidation is often necessary to secure concerted action regarding franchises and municipal services generally. Metropolitan Boston has been a remarkable success in this regard. Its sewerage commission, the State trustees of public reservations and the rapid transit commission with the best expert ability available have together proved how cheap in the end is good work even if initially costly. New York, Harrisburg, and Washington are also described with interesting illustrations. America is face to face with the problem of making town life as healthy and agreeable as possible. It is a time when towns are growing fast and the ideals and work are stimulating.

GOVERNMENT REGULATION OF RAILWAY RATES.

Nowadays business men are compelled to be students of many a problem only indirectly connected with their business. That of railway rates is one example. The splendid work of our own Railway Commission is at once a result and a cause of such a condition. A book giving the results of a study of the experience of the United States, Germany, Austria, France, Russia, and Australia will, consequently make interesting reading for many. Attention may, therefore, be directed to Professor Meyer's book on this topic recently issued by The Macmillan Company of Canada. Toronto ($1.50).

The hopes of advocates of state ownership and their disappointments, the universal and eternal problem of differentials, long and short haul, etc., are here lucidly presented. The problem is not merely one of the railways and the public but of conflicting private and of conflicting geographical interests. This twofold aspect must not be forgotten. State ownership, the author argues, with a strong show of reason, handicaps the Government by reason of disturbing political influences. Striking illustrations are given of how the state-owned railways of Germany have checked not only the consolidation of the Fatherland, but have seriously retarded the industrial development of many rich sections. Russia paralyses the Siberian railways, and Australia has created what the author calls its "curse" a tremendous concentration in two or three cities, to the detriment of the counry generally. Canals are a measure of relief, but only of relief. German state railways are fast becoming feeders to the canals and rivers simply because they are bound hand and foot by jealous competing localities.

The author believes government regulation of rates by means of a railway commission, as in the United States, and in this country, has proved to be the best means of allowing commercial freedom, adequate regulation, and a minimum of conflict between political and industrial life. He confesses frankly—and the statement should be noted—that railway rates must be fixed on reasonable commercial grounds, and must often represent compromises. These last must be based however, on intelligence and good faith. Thus while the rate for 100 miles may at times reasonably be higher than the rate for 200 miles, there must be ground to justify it; above all it should not be of the nature of a secret rebate (secrecy being one of the evils to be avoided) nor involve personal discrimination which is an evil hardly less serious. On the topic in hand no such effective book has been issued as yet, and Professor Meyer's volume may be heartily recommended.

THE BASIS OF OUR CIVILIZATION.

For the first time in the history of civilization, Prince Cropotkin writes, mankind has reached a point where the means for satisfying its needs are in excess of the needs themselves. We are thus placed in a position to remodel the very basis and contents of our civilization; not alone to have more goods to enjoy but what is almost equally important, some knowledge of how to use them.

A volume just issued, entitled the "New Basis of Civilization," by Professor Patten (Toronto: The Macmillan Co. of Canada. Price $1), reviews this subject, and emphasizes that it is to the family that we must look for a test of our civilization. If girls are protected long enough to find protection in marriage and a healthy domestic life, if men can be early persuaded to found homes, many of the unsightly evils of our society will disappear; for the family is the heart of our civilization. As long as it beats true there is hope that industrial and political life will be bettered. In short our civilization, the author concludes, is to be judged by its ability to create families and establish healthy, moral, conservative households. The great industrial advances of the world during the last half century are helping to bring this possibility nearer realization.

An artistic booklet has been received from John Taylor and Company, Toronto. The booklet forms a complete illustrated catalogue of the soaps and perfumes manufactured by this company.

Charles R. Whitehead, late manager of the Dominion Textile Company has formed a new company to be known as the Wabasso Cotton Co., with a capital of $1,750,000. The plant will be located at either Three Rivers, Ottawa, St. John's or Sherbrooke. It is hoped that the mill will be in operation by next January.

AMONG THE INDUSTRIES

The Freyseng Cork Co. are building a number of additions to their factory.

The firm of D. K. McLaren has been converted into a limited liability company.

The Nova Scotia Steel and Coal Company will start developing a new colliery at Point Aconi.

The town of Saskatoon, Sask., is considering a proposition for the establishment of a paper mill.

The Massey-Harris Company will erect a warehouse in Saskatoon this summer at a cost of $40,000 to $50,000.

The Corby Distillery was destroyed by fire during the month. The loss was about a quarter of a million dollars.

The wood-working factory of William Gardhouse, Carman, Man., was destroyed by fire on May 14. The loss amounted to $4,000.

The American-Canadian Oil Company have installed a complete plant at Morinville, near Edmonton. The boring machinery cost $25,000.

The Standard Chain Company of Canada, a branch of the big United States company, will erect a plant in Walkerville at a cost of $200,000.

Thomas A. Somerville and W. Wishart Van Every have opened an office in Hamilton, as consulting and supervising engineers and factory architects.

The Union Abattoir Company, of Montreal, suffered a severe loss, estimated at $100,000, by a recent fire. Defective electric wiring was the cause.

The Lynch Bros. Dolan Company, Limited, of Sydney, C.B., manufacturers of biscuits, bread, etc., are contemplating adding an addition to their plant.

The Toronto Engraving Company has obtained a permit for an office building five stories high, at the corner of Adelaide and Duncan Streets, to cost $30,000.

The J. C. Mitchell Smokeless Powder Company, Limited, with a capital of $100,000, will build a factory in Medicine Hat for the manufacture of explosives.

The old McKinnon Dash and Metal Factory building in St. Catharines is being remodelled to suit a woollen manufacturing plant which J. B. Dolan is installing.

The factory building of the Stratford Cordage Company, which was offered for sale by auction recently, was withdrawn as a high enough bid was not received.

The buildings for the Silica brick works, Victoria, B.C., are completed, and the machinery is now being installed. The plant will be one of the biggest in the west.

A company to manufacture office furniture will establish a plant in Hamilton. A site has been acquired on Arthur Street, and plans are now being drawn for the building.

The Clark Foundry Co. will build new foundry works in Sydney, C.B. The building will be of steel and concrete, and will be equipped with the most modern machinery.

Campbellford is to have a Bridge Works. The ratepayers have voted to loan James Dickson and Geo. T. Dickson $15,000 to aid them in the erection of suitable buildings, etc.

Purdy Mansell, Ltd., have moved to their new building on Albert Street, Toronto. This building was built for the company, and admits of a much more convenient arrangement of stock.

Extensions to the car shops of the Grand Trunk Railway at London will be made during the coming summer. They will involve an outlay of $75,000, and an increase in the working force of 200.

The capital stock of the Montreal Rolling Mills Co. has been increased from $816,000 to $1,200,000. The proceeds from the sale of the new stock will go for general extensions and improvements.

The Page-Hersey Iron, Lead and Tube Company, of Guelph, will build a large addition to their factory this summer. When the new plant is completed the output of the company will be almost doubled.

The business of the Brinton Carpet Company of Canada, whose plant is located at Peterborough, has been turned over to a joint stock company with a capital of $250,000. The stock is held by the original owners.

A company who will manufacture street cars are considering St. Thomas as a location for their plant. The Board of Trade have taken the matter up, and a big effort will be made to secure the industry.

Th Canadian Locomotive Company, of Kingston, will spend $300,000 on extensions to their plant during the coming year. The power-house will be of the most up-to-date kind, and will cost with equipment $100,000.

R. R. Hall, M.P., has purchased the assets of the William Hamilton Manufacturing Company, of Peterborough, for $192,000. The agreement with Mr. Hall has been ratified by the creditors, and will go into effect.

The Alberta-Pacific Elevator Company will build a large elevator at Calgary. The new plant will be the concentrating point for all branch elevators of which the company owns thirty or forty, distributed through the Province.

Two fifteen-ton converters have been built by the Dominion Iron and Steel Company for use in connection with their open-hearth furnace. The system used is the Duplex, and a considerable saving in time results from the process.

The Amherst Foundry Company, Limited, suffered a loss by fire on May 2nd, of $75,000. The interior of the building, machinery, much manufactured stock, and raw material, and all the patterns of the store and foundry department were destroyed.

At a recent meeting of the City Council of Halifax it was decided to grant a free site of ten acres to W. P. McNeill & Co, on condition that they establish their structural steel and bridge building works in that city. The company is at present located in New Glasgow.

The Colonial Whitewear Company will begin manufacturing ladies' waists, shirt waist suits, and general whitewear, in Guelph, as soon as their factory is in readiness. A. F. Moritz, now of Gault Bros., Montreal, will be the managing director.

Chesley is to have a new furniture factory. The Chesley Furniture Co., which will begin operations very soon, will manufacture library and parlor tables, music and china cabinets, etc. The three storey brick factory building is now nearing completion.

The Manitoba Linseed Oil Mills, Ltd., will erect an $80,000 plant somewhere in Manitoba, and are now investigating the advantages of various towns. The city council of St. Boniface has been asked to grant a ten years exemption from taxes on condition of the mills being built there.

The newest of Galt's industries, the Maple Leaf Electrical Manufacturing Company, commenced operations during the past month. The business will be carried on in the old Organ Factory for the present, although larger premises will be required before long.

The Ridgetown Canning Company will receive a bonus from the municipality of $10,000. A plant will be erected at a cost of $35,000.

The Glencoe Woollens Knitting Factory, which has been in operation in Glencoe for about a year, has closed, owing to financial difficulties.

The Carriage Mountings Company, Limited, of Toronto, has commenced operations on new factory buildings at Niagara Falls, Ont. The buildings will be of one storey, with saw-tooth roof, and are to be ready in July.

Ames-Holden, Limited, shoe manufacturers, Montreal, have commenced the erection of a new factory which will have a total floor area of 129,709 square feet. The building will be thoroughly modern, fire-proof construction throughout.

The ratepayers of Tillsonburg will loan William Berry, of that town, $15,000, in consideration of which he will erect a toweling and textile factory at a cost of $35,000. Mr. Berry will proceed at once with the erection of the necessary buildings.

The British-American Oil Refineries, Limited, will establish a refinery in Vancouver, at a cost of $220,000, during the next few months. The plant will be able to treat 1,000 barrels of crude oil per day and will admit of extension to double that amount.

The Colonial Weaving Company, of Peterborough, will increase their capital from $60,000 to $110,000. They are also applying to the city of Peterborough for a fixed assessment and a free site. The company contemplate erecting a new building and putting in considerable new machinery.

The Crescent Cement Works at Longue Point suffered severely from fire last month. The buildings were comparatively new, and they with the machinery are almost a total loss. The company had further new buildings under construction, which they were able to occupy soon after the fire.

The Van Bever Packing and Provision Co., Limited, have commenced operations in Toronto Junction. Mr. Van Bever, who is managing director, formerly managed the Northland Manufacturing Company in a similar line of business. The new company have an extensive plant in operation.

A strong movement is under way to establish car construction works in Victoria, B.C. The proposition has been under consideration for some time. It is now being taken up energetically by a number of the business men of the city, and gives promise of being brought to a successful issue.

A new company has been organized to operate coal areas in Nova Scotia. North Atlantic Collieries, Limited, have acquired thirty-six leases, covering an area with six proven coal seams. The district is undoubtedly immensely rich in coal. Port Morien will be the shipping port of the company.

The Canadian Wolverine Manufacturing Company are negotiating with the Council of Chatham for the establishment of their plant there. This is the Canadian branch of a Grand Rapids, Mich., manufacturing company. They manufacture all kinds of brass and copper goods, chiefly in the line of plumbers' supplies.

The Brompton Pulp and Paper Company, of Brompton Falls, Que., and the Royal Paper Co., of East Angus, Que., have been consolidated. The deal has been under negotiation for a considerable time, but it was only recently that final arrangements were completed. The output of the combined plants will be very large.

Negotiations are under way tending towards an amalgamation of the Dunbar Works of Woodstock, N. B., and the New Brunswick Foundry, of Fredericton. Such a move would mean the removal of the Dunbar shops to Fredericton. If the amalgamation is consummated the company will probably go in for the manufacture of cars.

The Natural Fuel and Power Company, which was recently incorporated in New York with a capital of $250,000, will operate in the peat districts at Black Lake, near Brockville. Experiments have been in progress for some months and the special machinery installed has proved satisfactory. A plant will be established at an early date.

The Western Canners, Limited, will establish their plant at Medicine Hat. A site has been purchased, and machinery will be installed at once. Three other buildings will be erected during the coming summer. The company will employ 65 men to commence with, which number will be increased when the new buildings are completed.

The Schwartz Brick Company, of New York, are building a brick-making plant at North Battleford, Sask., at a cost of $75,000. It is expected that in a month the plant will be turning out 20,000 bricks per day. North Battleford has in course of construction three other factory buildings, a planing mill, a flour mill, and an electric light and power plant.

A new paper mill has been added to the plant of the pulp mills which have been operating at Milton Falls, N.S. A new company has been organized of Nova Scotian capitalists, which has purchased the pulp mills and timber limits from the old proprietors. The output is now 8,000 tons of pulp per year, and the capacity of the paper mills will be 2,000 tons.

Grosch & Sons, manufacturers of felt goods, have decided to move from Milverton to Guelph. They are arranging for a new plant which will employ between 75 and 100 hands. Their business has grown to such an extent that extensions were necessary, and they are taking advantage of the necessary changes to move where greater development is possible.

The owners of the Silicate brick factory at North Sydney have been approached by a number of Canadian capitalists, who now control a large number of brick works throughout the country. Whether the sale takes place or not it is understood that operations will be resumed at the works. The plant has not been in operation for the last couple of years.

The Brockville Malleable Iron Company is being organized in Brockville with local capital. The preliminary work has been done, and stock lists are now open. The directors purpose to establish a plant capable of producing either five tons or ten tons of castings daily. The five ton plant complete, including $14,000 for working capital, is estimated to require $35,000, while a ten ton plant is estimated at $50,000.

The old flour and rice mills on Store Street, Victoria, B.C., which have been out of operation for a number of years, are to be reopened in the near future. In connection with the flour mill it is expected that a large elevator will be erected to handle the grain. New machinery will be installed in the rice mill. The Mount Royal Milling and Manufacturing Company, of Montreal, are taking over the enterprise.

A plant for the manufacture of steel and wooden cars is now almost assured for Moncton. It is proposed to utilize the old I. C. R. shops, on a ninety-nine year lease. Capital for the new enterprise has been already arranged for, and the Board of Trade are petitioning the council to grant certain privileges in the way of free water and light and exemption from taxation. E. A. Wallberg is promoting the company.

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the name of enquirers, apply by number to the Secretary, of Toronto.

333 **Agent.**—Traveller, Englishman, of long experience in every part of the British Empire, desires to represent Canadian houses in **Great Britain.**. Furniture and kindred lines preferred, but others will be carried. Good references.

334 **Agents.**—Well-known **Brussels Belgium** Commission house with wide connections and experience is open to represent two or three reliable Canadian firms in Belgium and France. Highest references.

335 **Agent.—Western Canada.** Well-known **Alberta** gentleman with wide business connections throughout the West, thoroughly in touch with Western market conditions and with excellent bank and other references would be glad to hear from Eastern manufacturers desiring Western representative on a commission basis.

336 **Agent.—New Zealand.** Former Canadian well recommended, now residing in **New Zealand,** is anxious to hear from Canadian houses open to appoint him their agent in New Zealand. Will carry any lines and has good connections.

337 **Agricultural Implements.**—An importing house in the **City of Mexico,** wishes to make connections in Canada with manufacturers for the sale in **Mexico** of agricultural implements.

338 **Apples.**—An importer in **Finland** makes enquiry respecting the names of first-class Canadian exporters of fresh apples, with whom he desires to establish business relations.

339 **Asbestos Fibre and Paper.**—A **London** firm of merchants wishes to correspond with Canadian producers of asbestos fibre and paper seeking representation in England.

340 **Birch Logs, Pine Deals, etc.**—A **Manchester** firm asks for prices and dimensions of Quebec birch logs, pine deals, boards and sidings from Canadian exporters of same.

341 **Blind Roller Squares.**—A **Manchester** firm desires prices of blind roller squares in pine, all sizes, from Canadian manufacturers.

342 **Bronze Powder.**—A **Lancashire** firm asks for samples and prices of bronze powder from Canadian shippers of same.

343 **Brick-making Machinery, Cement and Building Materials.** Gentleman just engaging in the manufacture of bricks, etc., in **Alberta** is open to purchase supplies for the equipment of his factories.

344 **Bran.**—Enquiry is made for the names of Canadian exporters of bran who are in a position to ship on a large scale.

345 **Brush Handles.**—A **Manchester** firm wishes quotations for brush handles, plain and taper top, sizes 1-inch, 1 1-10-inch, 1⅛-inch, by 5 inches long from Canadian manufacturers.

346 **Casein.**—A **London** firm is open to purchase commercial casein in large quantities and wishes to get into touch with Canadian manufacturers. They are also interested in edible casein.

347 **Cheese, Butter, Bacon, etc., etc.**—A **London** firm of merchants with branches at Liverpool and elsewhere, proposes making a specialty of Canadian trade, and would be pleased to hear from Canadian shippers of cheese, butter, bacon, eggs, lard, peas, flour, oatmeal and apples, who wish to be represented in the United Kingdom.

348 **Clothes Pegs.**—A **North of England** firm asks to be put in communication with manufacturers or shippers from Canada of clothes pegs and similar articles.

349 **Copper Ingots.**—A **Manchester** metal agent invites correspondence from Canadian shippers of copper ingots.

351 **Electrical Plant and Accessories.**—Large **English** firm of dealers in electrical supplies and plant of all kinds with branches all over the world is anxious to get in touch with Canadian firm who could do an export business in these lines with **South Africa.**

352 **Elk Hides.**—A **London** firm of boot manufacturers desires the addresses of Canadian shippers of elk hides.

353 **European Representative.**—Reliable and enterprising traveller with first-class references and good connections throughout **Europe and Great Britain** would be glad to assist Canadian firms to introduce their goods in the markets of Europe. Twenty years experience, speaks English, French and German fluently and has some knowledge of the Spanish and Portuguese. Could act as purchaser for Canadian houses if desired. Further particulars at this office.

354 **Evaporated Apples.**—Well-known **Antwerp, Belgium,** commission agent with extensive trade is open to purchase large quantities of evaporated apples on commission from Canadian exporters. Direct steamship line Montreal to Antwerp in summer months.

355 **Flour, Hominy Feed, Oats, Boots and Shoes, etc.**—A general dealer wants the names of Canadian manufacturers of flour, hominy feed, oats, boots and shoes, etc.

356 **Hall Stands and Wood Bedsteads.**—A **Manchester** firm desires to obtain prices and description of hall stands and wood bedsteads from Canadian manufacturers.

357 **Hard Insulating Fibre.**—Old established firm of electrical supplies dealers in **Paris, France,** is anxious to purchase hard fibre used for insulating purposes in Canada. Will purchase or sell on commission.

358 **Home Spuns, etc.—British Honduras** firm of general merchants and tailors desires quotations from Canadian exporters of home spuns, tweeds, etc., with a view of buying in Canada.

359 **Laths.**—A **Manchester** firm asks for prices of sawn plaster laths, sizes 1½ inch x 3-16 x 3 ft. 6 inches, 4 ft. and 4 ft. 6 inches from Canadian manufacturers.

360 **Linseed Oil-cake.—Corn and Wheat Meal.—Made, Holland,** merchant with thorough knowledge of oil-cake business has just organized a big company to handle commodity in Europe. Is open to purchase from 3,000,000 to 5,000,000 kilograms per week in winter months, and will be glad to hear from Canadian shippers. Also enquiries for Canadian exporters of corn and wheat meal.

361 **Lumber.**—A **Liverpool** firm are open to purchase 200 standards, or any considerable portion thereof of ½-inch by ½-inch laths in lengths which must be multiples of 5 inches. Red and white wood. Shipments within 12 months. Payment against bill of lading or otherwise as desired.

362 **Lumber.**—An importing house in the **City of Mexico** wishes to make connection in Canada with lumber firms, for the sale of construction materials, both in the rough and dressed.

363 **Machinery.—Wakaw, Saskatchewan,** resident desires to get in touch with manufacturers of machinery suitable for sugar and vinegar factories.

364 **Malleable Iron Castings: Hub Boxes, Bands, Axle Boxes and Other Carriage Gear.—Altona, Germany,** wholesale dealer in carriage and automobile supplies on a large scale is anxious to purchase grey and malleable iron castings for carriages, auto cars, etc., especially hub boxes, bands, and axle boxes for heavy vehicles from Canadian manufacturers. Wants catalogues and price lists as soon as possible.

365 **Molybdenum Ore, etc.**—A **Lancashire** firm is open to act as agents in the United Kingdom for Canadian firms exporting molybdenum and molybdenite and other similar classes of ores.

366 **Oak-heads for Barrels.—Manchester, England,** manufacturer enquires for Canadian exporters of oak heads for barrels. Open to purchase considerable quantity at regular intervals.

367 **Onions.**—A **London** firm wishes to hear from Canadian firms open to supply onions ready peeled for pickling.

368 **Paper (all kinds), Twine, Confectionery, Dried Fruits, Soaps, Bicycles, Printers, etc.**—First-class firm of general merchants and commission agents in **Barbados, B. W. I.,** enquires for reliable Canadian exporters of the foregoing lines. References.

369 **Pick and Shovel Handles.**—A **Sheffield** firm wishes to hear from firms open to supply pick and shovel handles.

370 **Pitch and Oregon Pine.**—A firm in **Egypt** wishes to purchase large quantities of pitch pine and Oregon pine.

371 **Pitch.**—A **Continental** firm would like to get in touch with Canadian firms shipping pitch.

372 **Photo Goods, Stationery, Rubber Goods, Medicines.—North India** firm of general merchants wishes wholesale rates and samples from Canadian manufacturers of photo supplies, stationery, rubber goods, and medicines.

373 **Provisions.**—An important **London** firm desires the names of Canadian exporters of provisions and Canadian produce generally, who are not already represented in Great Britain. The firm in question desires to act as agents.

374 **Refrigerators.**—A **Lancashire** firm asks for prices and description of refrigerators from Canadian manufacturers.

375 **Roll-top Desks, etc.**—A **Manchester** firm wishes to obtain prices and description of roll-top desks and office furniture from Canadian manufacturers.

376 **Rubber Wringers.**—A **Manchester** firm asks for prices of rubber wringers from Canadian manufacturers.

377 **Rocker Churns.—Ontario** hardware firm is open to purchase a number of rocker churns.

378 **Saw-mill Machinery, etc.**—An old established firm of engineering merchants in **Newcastle-on-Tyne** are open to represent Canadian engineering firms for the sale of such goods as saw-mill machinery, machine tools, hand-pumps, etc. Catalogues and price-lists are invited.

379 **Sole Leather.—St. Lucia, B. W. I.,** merchant is open to buy small quantities of sole leather in Canada from time to time. References.

380 **Split Oak Dowels.**—Large firm of dealers in wood building specialties and materials in **French Provinces** desires to hear from Canadian exporter of split oak dowels with a view of purchasing here. Will order in lots ranging from 100,000 to 1,000,000. Payment cash and good references.

OUR OWN STORY

The ambition of **The News** is to serve its public. We are glad to know from our own observation, and the assurances of those who take **The News** and advertise in it, that in this ambition we have succeeded.

It is the practice of **The News,** as it is that of every reasonable citizen, who, himself is succeeding, to applaud others who are doing able work in the same field. Toronto has six successful newspapers. Five of them look successful, and we believe they are successful. But about the sixth we know.

The News serves its own public as no other paper can. Information which we place at your disposal with regard to our circulation, advertising rates and general growth, is absolutely dependable. Any further information which you may desire we will be happy to supply. Our knowledge of our own business is naturally accurate and complete. The office of **The News** is the only place where the business of **The News** can be thoroughly known. That knowledge, which is a source of satisfaction to us, we place cheerfully at your service. Other people's business never occupies our business nor our leisure hours. But of our own business we make a study every day, and we understand it as no one else can.

We think highly of the people to whom **The News** is going, and of the people who advertise in it. We have every reason to think well of their treatment of **The News.** Study our paper and you will reach the conclusion that **The News** has come to stay, means to deserve its success, and is improving steadily.

If your business would be given a fresh impetus from advertising, **The News** is in a position to give it the necessary stimulus. Our time, experience and space are at your disposal.

The News, Toronto

ADVICE FOR WEST INDIES TRADE.

The report of the Canadian Board of Trade delegates to the West Indies contains some general statements which sum up the situation in a few words. They are included under the following items :

Commercial Travellers—Canadian manufacturers and exporters should make more systematic and determined efforts to place their goods before the buyers in the West Indies, who are regularly canvassed by American and English salesmen or resident selling agents, while Canadian goods are only spasmodically placed before them. Several Canadian firms have secured a good share of trade and a satisfactory increase annually, by persistent endeavour to supply what is wanted and to study details.

Drafts.—It was frequently pointed out that Canadian firms forward drafts which are received some time before the arrival of the goods, and cause friction. This could be avoided by marking them, "Hold for arrival of goods."

Postal Arrangements.—It was stated at Grenada that Canada charges 1s. 2d. per pound on parcel post, while the United States rate is 6d., and the English 1s. for three pounds. We feel that the matter of parcel post rates to the West Indies should be investigated by our boards of trade.

Cable Communication.—It was represented at Demerara that the present cable communication with Canada is very inefficient, and that cable messages from that point pass through several islands and thence to Jamaica and then to Canada. We were also informed by the delegation from Montserrat that their island has no cable communication whatever. The extension of the Bermuda-Jamaica cable might overcome these difficulties.

The Question of Preference—Whenever the opportunity presented itself, we suggested the adoption by the various colonies of a preferential tariff in favour of British products. The tariffs in the West India Islands are in almost every case for revenue only, and as these do not always provide sufficient funds to meet expenditures, it was pointed out that they could fix the preferential at the present rate, and raise the general tariff. Mr. Winston Churchill's remarks in a recent speech, in favour of British intercolonial preferences, were used to show the probable attitude of the Home Government towards this all-important policy of British commerce. We learned with great satisfaction that the legislature of the Leeward Islands last year unanimously adopted a resolution in favour of a Canadian preference, and the same has been forwarded to the Home Government.

Most Everything in RUBBER GOODS



THE DUNLOP COMPANY makes many lines of rubber goods besides tires. The list given hereunder is incomplete, but it will serve to show the wide variety.

Anti-rattlers.

Automobile Tires and Accessories
(Catalog "P")
Dunlop Clincher, made in the standard American sizes, and in the Millimeter sizes.
Dunlop Perfected Detachable.
Dunlop Perfected Detachable for Universal Rims.
Dunlop Heavy Service Tire.
Dunlop Dismountable Rim Tire.
Dunlop non-skid covers for all types and sizes of tires.

Baby Carriage Tires in continuous lengths.

Bands for Band Saws.

Belting. (The new addition to the Dunlop factory will be complete in July, and the Company will then be in a position to make all lines of rubber belting.)

Bicycle Pedal Rubbers.

Bicycle Tires and Accessories
(Catalog "T")
Dunlop Detachable.
G. & J. Detachable.
Electric, Single Tube, Cemented.
Imperial, Single Tube, Cemented.
Record, Single Tube, Cemented.
Record, Double Tube, Cemented.
Reliance, Single Tube, Cemented.
Reliance, Double Tube, Cemented.

Carriage Tires, solid rubber, pneumatic and cushion.

Bumpers
Solid Rubber Bumpers for every purpose, made in all shapes and sizes.

Chair Tips.

Cements
Acid Cure Cement.
Rubber Cement.
Vulcanizing Cement.

Carriage Mats.

Coffin Strips.

Cord, Rubber.

Cushion Desk Pads, pure gum, for banks and post offices.

Cushion Rubber Carriage Tires, made in continuous lengths.

"Demerast" Floor Flanges.

Elastic Bands.

Finger Tips, pure gum.

Floor Tiling, "Anchor," Interlocking.

Floor Matting.

Friction Tape.

Gaskets, oval and round, adjustable to any size hand or man hole.
Gaskets, pure sheet.

Heels
Dunlop "Comfort" Rubber Heels.
Dunlop "Cushion" Rubber Heels.
Dunlop "Round" Rubber Heels.

Horseshoe Pads
Dunlop "Ideal" Pad.
Dunlop "Bar" Pad.
Either style made with canvas or heavy oak tanned leather backing.

Hose
Air Brake.
Air Drill.
Signal.
Steam.
(A further announcement will be made shortly with regard to the Company's facilities for making other lines of hose.)

Inner Tubes for every size and form of pneumatic tire.

Insulators, electrical.

Invalid Chair Tires, pneumatic.

Packing
High Pressure Steam.
"Polar Bear" (White).
"Ebony" (Black).
"Sunset" (Red).

Patches, rubber, for repair work.

Rods, Hard Rubber, electrical.

Slotted Screw Tips.

Stamp-makers' Gum.

Stair Treads.

Solid Rubber Tires
(Catalog "O")
Internal Wire, made in continuous lengths, for carriages and light vehicles.
Side Wire, made in continuous lengths, for heavy vehicles, busses, fire reels, fire engines, etc.
Endless Side Wire Tires for motor trucks and lorries.

Valves, Hard and Soft Rubber.

Valves, Marine.

Vulcanizing Rubber for repair work.

Test Plug Rings.

Top Prop Blocks.

Truss Bags.

Typewriter Feet.
Typewriter Rollers.

Washers
Cow Test Bottle Washers.
Cream Separator Washers.
Guage Glass Washers.
Tap Washers.

Weather Stripping.

Window Cleaner Rubbers.

Wringer Rolls.

If you don't see what you want WRITE FOR IT

We can make anything in rubber moulded goods. Send in sample or specification of what you want and we will return a prompt estimate.

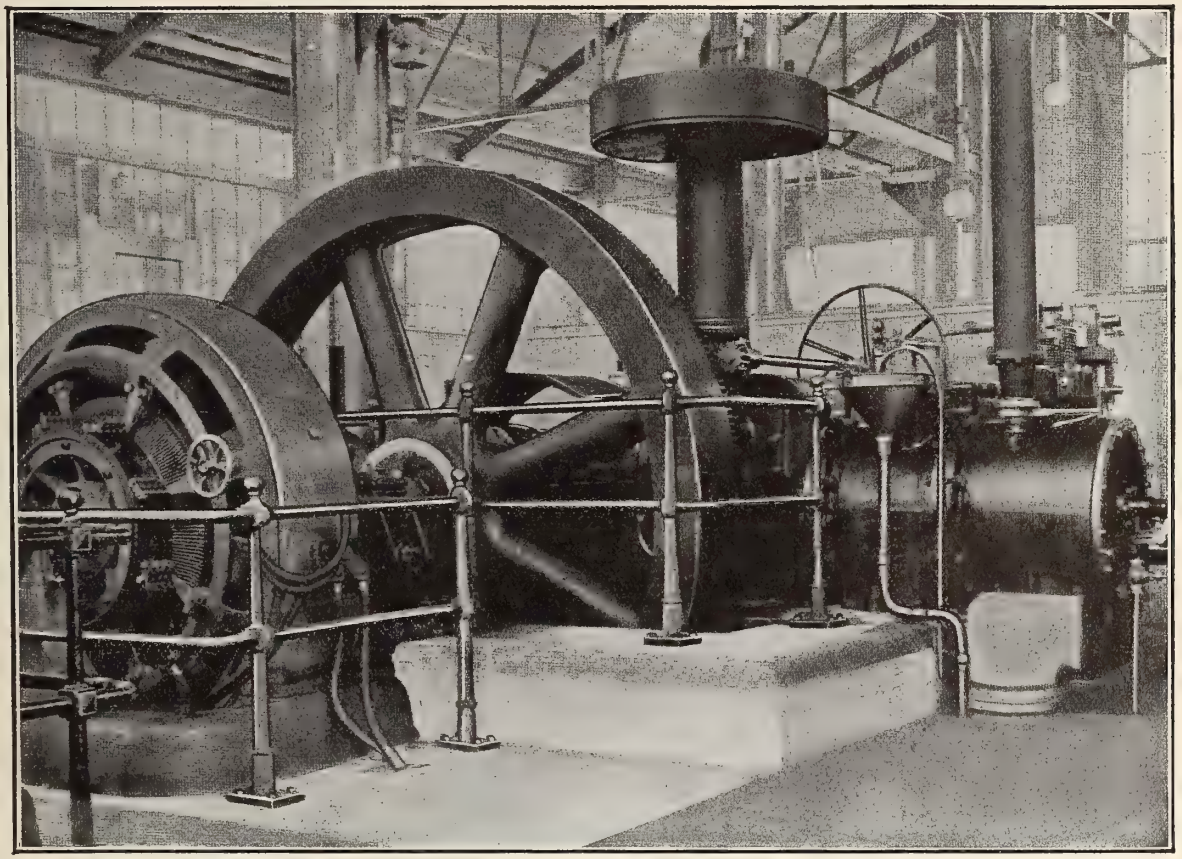
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A REMARKABLE INVENTION FOR THE CULTURE OF HAIR

THE EVANS VACUUM CAP is a practical invention constructed on scientific and hygienic principles by the simple means of which a free and normal circulation is restored throughout the scalp. The minute blood vessels are gently stimulated to activity, thus allowing the food supply, which can only be derived from the blood, to be carried to the hair roots, the effects of which are quickly seen in a healthy, vigorous growth of hair. There is no rubbing, and as no drugs or chemicals of whatsoever kind are employed, there is nothing to cause irritation. It is only necessary to wear the Cap three or four minutes daily.

60 DAYS FREE TRIAL

THE COMPANY'S GUARANTEE

An EVANS VACUUM CAP will be sent you for sixty day's free trial. If you do not see a gradual development of a new growth of hair, and are not convinced that the Cap will completely restore your hair, you are at liberty to return the Cap with no expense whatever to yourself. It is requested, as an evidence of good faith, that the price of the Cap be deposited with the Chancery Lane Safe Deposit Company of London, the largest financial and business institution of the kind in the world, who will issue a receipt guaranteeing that the money will be returned in full, on demand, without questions or comment, at any time during the trial period.

The eminent Dr. I. N. LOVE, in his address to the Medical Board on the subject of Alopæcia (loss of hair) stated **that if a means could be devised to bring nutrition to the hair follicles** (hair roots) **without resorting to any irritating process, the probiem of hair growth would be solved. Later on, when the EVANS VACUUM CAP was submitted to him for inspection, he remarked that the Cap would fulfil and confirm in practice the observations he had previously made before the Medical Board.**

Dr. W. MOORE, referring to the invention, says that **the principle upon which the EVANS VACUUM CAP is founded is absolutely correct and indisputable.**

An illustrated and descriptive book of the Evans Vacuum Cap will be sent, post free, on application.

THE SECRETARY, EVANS VACUUM CAP CO., Limited

REGENT HOUSE, REGENT STREET, LONDON, W.

TRADE NOTES.

"Goes like sixty" is the watchword of the Gilson Manufacturing Company, of Guelph. This company makes gasoline engines of various sizes, both air-cooled and water-cooled, but the goes-like-sixty slogan refers especially to their line of air-cooled engines, which they make in 1, 1½, 2½, and 5½ horse-power sizes.

By means of a number of flanges around the cylinder a cooling surface is provided of approximately 1,000 sq. in. in the 1½ horse-power, and 1,400 sq. in. in the 2½ horse-power. This is suplemented in the two larger sizes by a fan provided with baffle plates, which throws a strong current of air directly against the cylinder head. This fan is also supplied with the 1 horse-power when desired. As the sparking plug, intake valve and exhaust valve are all located in the cylinder head they are kept cool and efficient by the air constantly passing over them.

The Robb Engineering Co. have received the following orders:

Sydney and Glace Bay Railway Company, Sydney, C.B.
- 1—18 inch and 26 inch x 12 inch Robb-Armstrong vertical enclosed engine for D.C. to 250 K.W. Generator, speed 350.
- 2—250 horse-power 72 inch x 18 feet Return Tubular Boilers.
- 1—500 horse-power Robb Feed Water Heater, Steam Separator.

Brockville Light & Power Co., Brockville, Ont.
- 1—72 inch x 18 feet Return Tubular Boiler.

Alberta Portland Cement Co., Calgary, Alta.
- 1—21 inch and 40 inch x 24 inch Robb-Armstrong cross compound Corliss engine D.C. to 500 K.W. at 150 r.p.m.

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Protects from rain, snow and ice—from fire and lightning. Many Canadian Manufacturers have cured their roofing troubles by using

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manufactured by us.

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PRESTON - - ONTARIO

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IT IS SAID that Trade follows the Flag but Trade is more likely to follow where Good Stocks are kept. Ample Stocks and Quick Shipments

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Underwood

If you use a typewriter at all doubtless you use a visible writer — the other kind is obsolete. It may be that you have recently purchased some Underwood imitation for which strong claims were made; for instance, that the writing would remain in perfect and permanent alignment.

Everyone recognizes that the prime requisite of a typewriter is good work, and that good work necessitates accurate alignment. But no visible writer can possess this essential unless it has a guide at the printing point. The Underwood has the guide.

If you have a new Underwood-imitation, use it for six months. If it holds its alignment without the aid of the repair-man we will present you with the best typewriter made—an Underwood. Make the test; you stand to lose nothing, and — we feel quite safe.

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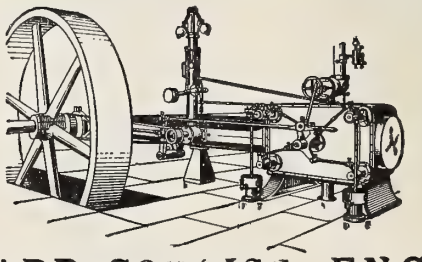
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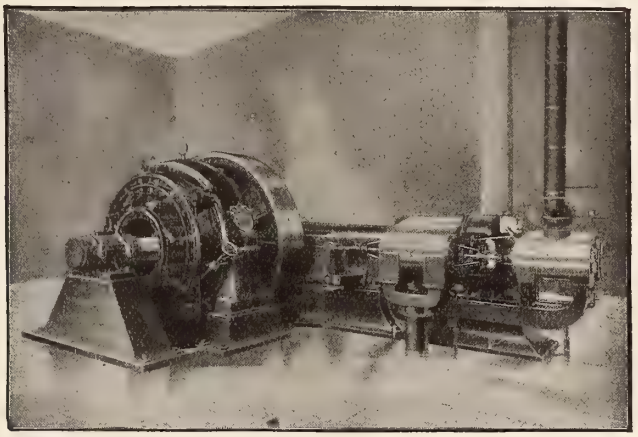


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The law says:

"Any man who fails and has not for five years before his failure kept proper books shall be liable to a fine of $800.00 and one year's imprisonment."

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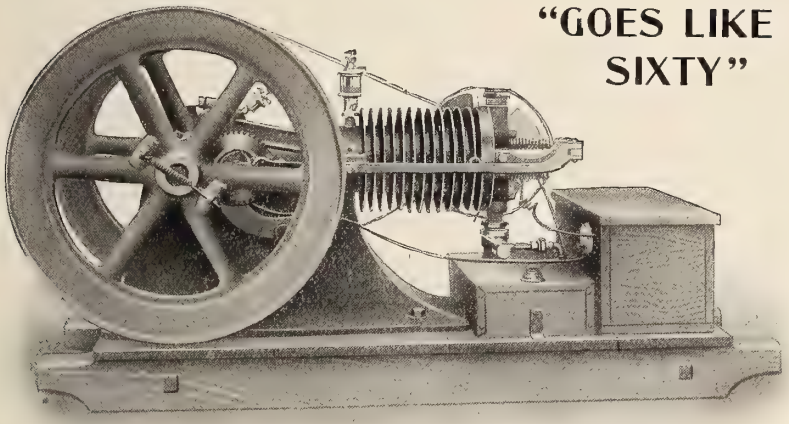
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THE GILSON AIR COOLED ENGINE

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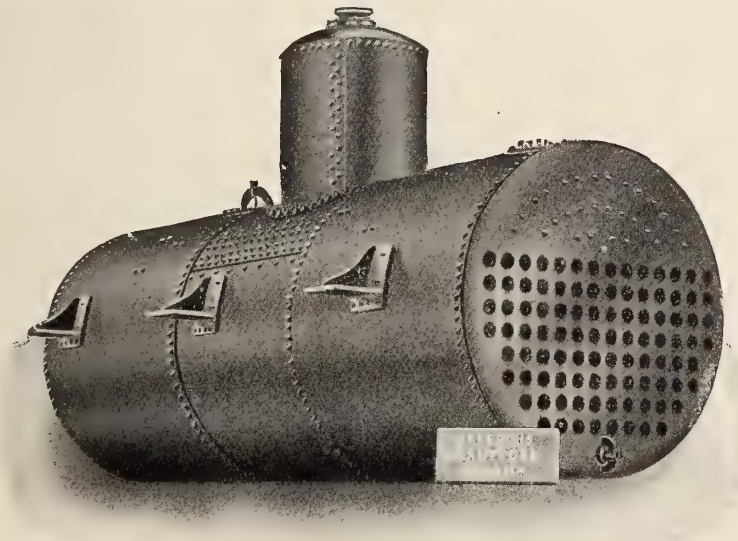
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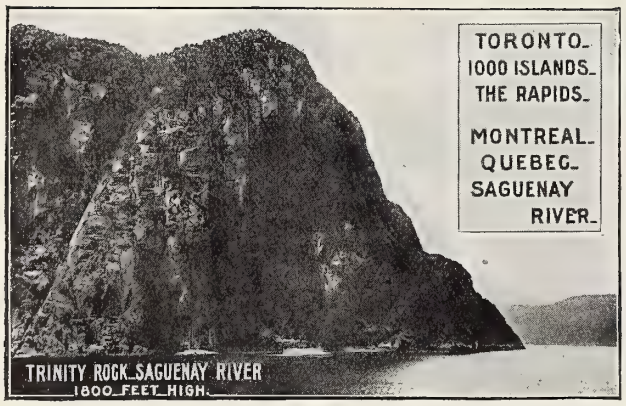
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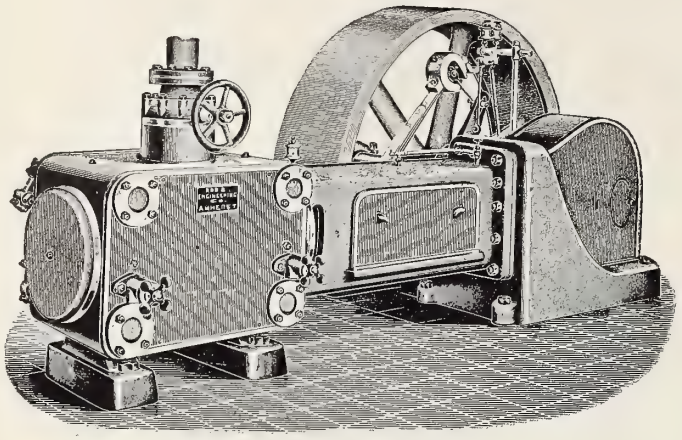
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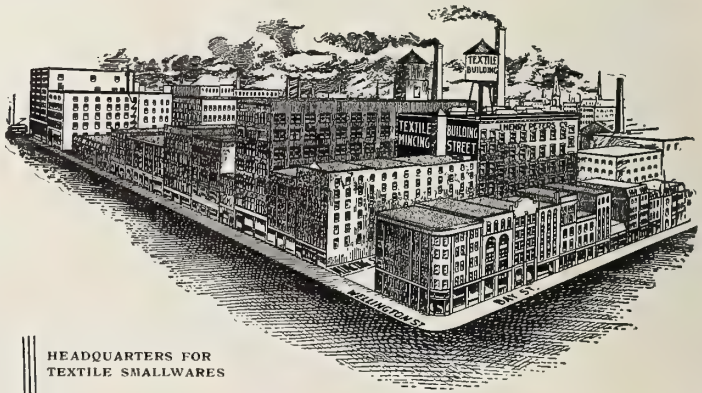
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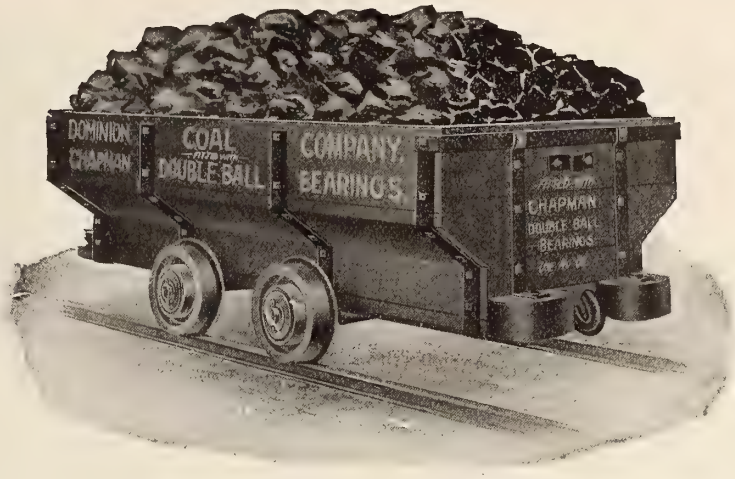
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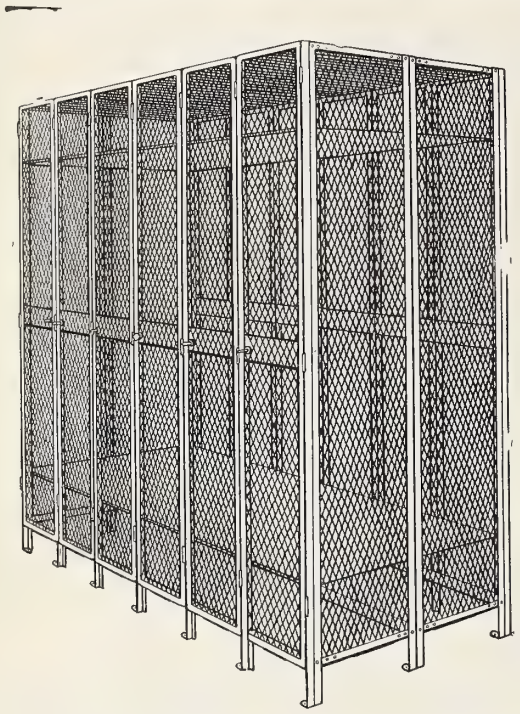
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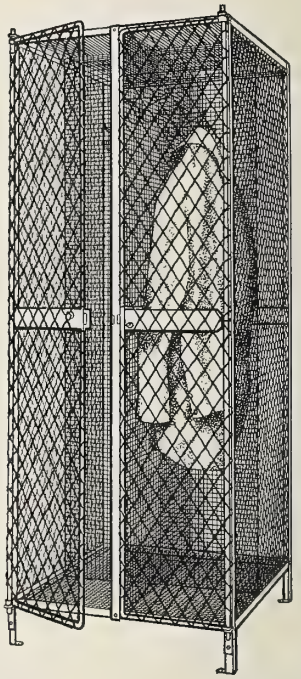


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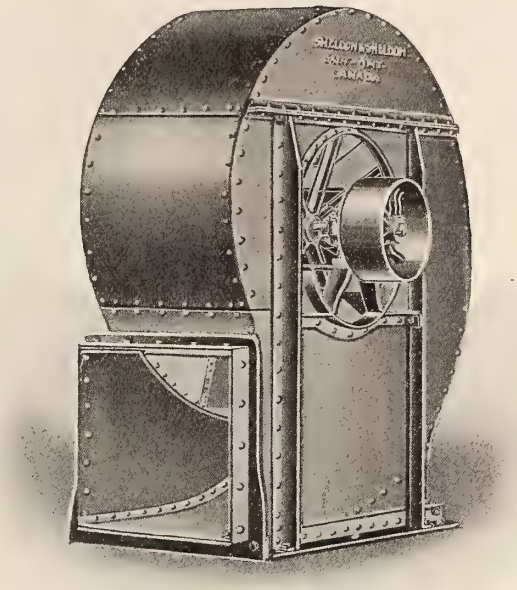
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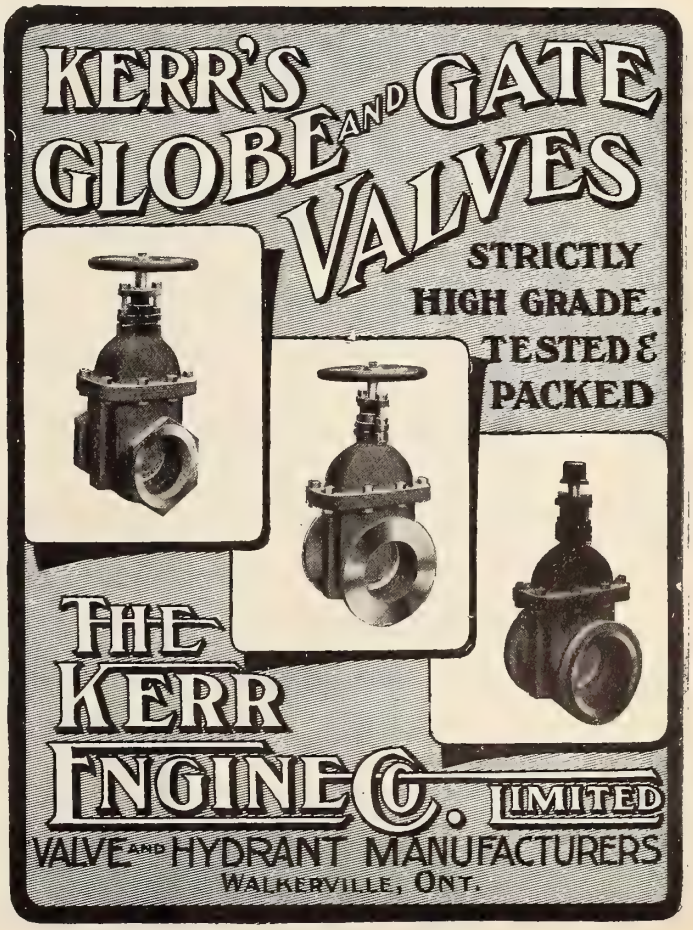
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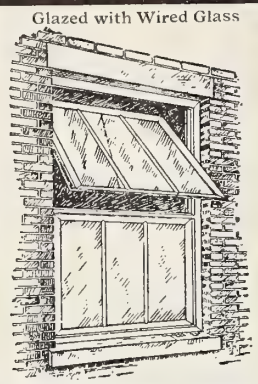
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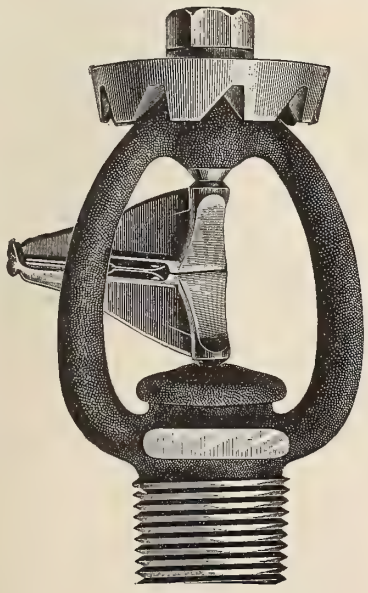
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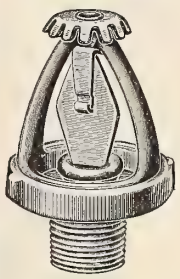
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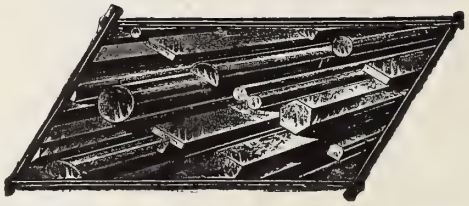
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LONDON, Ont.—John Mills, 398 Richmond Street.

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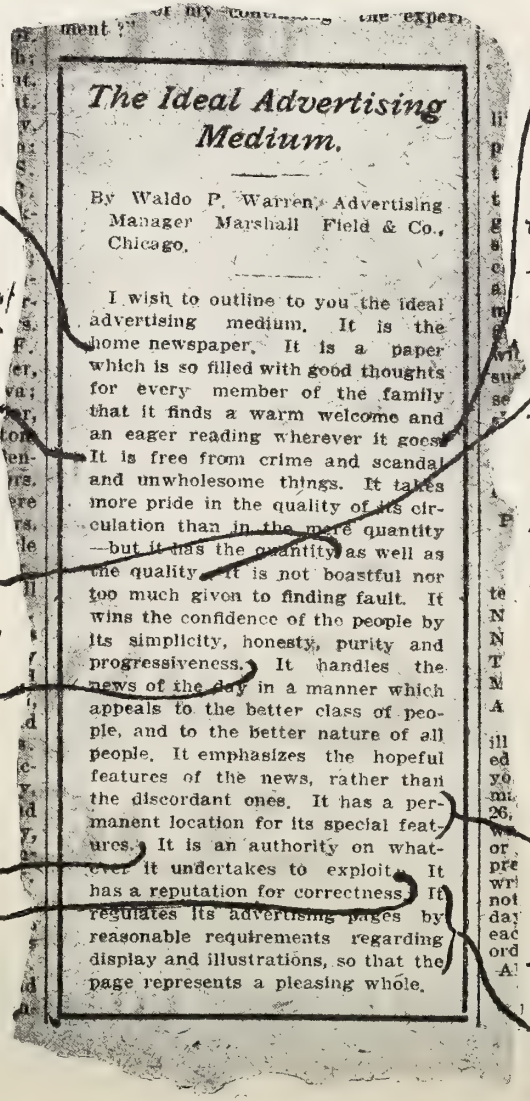
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a rule faithfully adhered to from the first issue of The Globe.

EXECUTIVE COUNCIL

MAY MEETING.

The regular monthly meeting of the Executive Council was held in the Board Room of the Traders Bank, Toronto, on Thursday, May 16th, at 2 p.m.

The President, Mr. H. Cockshutt, occupied the chair, and there were also present: Messrs. Geo. Booth, Toronto; S. B. Brush, Toronto; Geo. Brigden, Toronto; P. H. Burton, Toronto; L. V. Dusseau, Toronto; J. F. Ellis, Toronto; H. Fleury, Aurora; J. D. Flavelle, Lindsay; Geo. D. Forbes, Hespeler; Thos. Findley, Toronto; W. K. George, Toronto; Geo. Gillies, Toronto; R. S. Gourlay, Toronto; Edward Gurney, Toronto; S. Harris, Toronto; E. G. Henderson, Windsor; T. Hethrington, Quebec; Jos. Horsfall, Montreal; J. H. Housser, Toronto; J. I. A. Hunt, London; D. W. Karn, Woodstock; Col. MacLean, Toronto; W. K. McNaught, Toronto; J. S. McKinnon, Toronto; J. P. Murray, Toronto; T. F. Matthews, Peterboro; A. Nordheimer, Toronto; Wm. Robins, Walkerville; Frank A. Rolph, Toronto; J. D. Rolland, Montreal; W. H. Rowley, Hull; Alex. Saunders, Goderich; J. T. Sheridan, Toronto; J. H. Sherrard, Montreal; J. M. Sinclair, Toronto; H. J. Tellier, Montreal; W. B. Tindall, Toronto; G. A. Vandry, Quebec; R. J. Whyte, Smith's Falls; C. H. Waterous, Brantford.

COMMUNICATIONS.

Communications were received from the following members of the Executive Council regretting their inability to be present: Messrs. G. C. H. Lang, R. W. Paterson, John McKechnie, G. F. Stephens, H. B. Smith, J. R. Kinghorn, E. F. Hutchings, L. C. McIntyre, J. M. H. Robertson, C. N. Candee, S. S. Boxer, R. Hobson, W. J. Clayton, Geo. E. Amyot, E. W. Rathbun, Alfred Dickie, F. J. Campbell, J. J. McGill, John M. Gill, Fred Birks, D. Lorne McGibbon, J. A. Coulter, Robt. Munro, S. W. Ewing, D. J. Fraser, D. Murphy, L. J. Breithaupt, R. O. McCulloch, J. A. Playfair, W. T. Whitehead, C. C. Ballantyne, T. H. Smallman, Arthur W. White, R. J. Younge, Jas. Pender, S. J. Williams, A. A. Dechene, G. W. Ganong, H. L. Hewson, J. Davidson, H. Stroud, R. Thomson, C. W. Davis, Louis Simpson, F. W. Jones, Geo. Sweet, and Wm. Smaill.

PRESIDENT.

In opening the proceedings the President stated that he expected before another meeting to visit the Branches of the Association in Quebec and Winnipeg. The members in Halifax and St. John had already been visited. The holding of the Executive Council meeting in Montreal in January, at which he had been present, fulfilled the instructions of the Annual Meeting so far as that city was concerned. He further stated that the Secretary and himself had visited Vancouver and Victoria with the excursion party immediately following the Winnipeg Convention, so that he considered that the instructions of the Association, so far as they related to the coast cities, had already been complied with. The projected visits to Quebec and Winnipeg would complete his tour. He stated that it would be somewhat difficult to get back from Winnipeg in time for the Executive Council meeting were it held on the third Thursday in June, and suggested that permission be given by the Council to hold the June meeting on the fourth Thursday instead of the third.

The question was referred to the meeting, and it was ordered that the June meeting be held on Thursday, the 27th of June, instead of Thursday, the 20th.

TREASURER.

Mr. Geo. Booth, the Treasurer, read a statement of the receipts and disbursements for the month ending April 30th, showing a balance to the credit of the Association of $16,860.89. He called attention to the fact that the appropriation granted to the Insurance Department for carrying on its work had been overdrawn to the extent of $159, and suggested that the Council should approve of this advance, and authorize such further advance as might be thought necessary.

The report of the Association's finances as outlined by the Treasurer was received with satisfaction and the report adopted.

FINANCE.

Mr. W. B. Tindall, Chairman, read the report of the Finance Committee. It recommended for payment the monthly accounts, amounting in all to $1,419.80.

In accordance with authority given at the last meeting of the Council the Committee had decided to invest $5,000 with the Toronto General Trust Corporation for one year, commencing June 1st, at 4 per cent.

INDUSTRIAL CANADA.

The report of the INDUSTRIAL CANADA Committee was presented by the Chairman, Mr. Geo. Brigden. It showed a cash surplus for the nine months ending April of $2,149.82, and an estimated revenue surplus for ten months of $2,944.10.

It stated that as soon as the impending difficulty between the master printers and the typographical unions was settled it was the Committee's intention to call for new tenders for the printing of the paper.

Negotiations were under way with one of the best English export papers for an exchange of foreign news items, which, it was expected, would prove interesting and valuable to readers of the paper. It further stated that it was the intention of the Committee to open a few columns at the back of the paper to reading notices for advertisers.

The adoption of the report moved by Mr. Brigden, seconded by Major Hethrington, was carried.

COMMERCIAL INTELLIGENCE.

In the absence of the Chairman, Mr. J. P. Murray read the report of the Commercial Intelligence Committee as below:—

Japanese Trade.

A communication was received through the President from Earl Grey drawing attention to some of the more important sales made by Canadian houses to Japan since the favored nation treaty came into effect a year ago. With one or two exceptions it was shown that these orders all came through United States houses, the inference being that they were only given to fill up what could not be supplied by these houses themselves. Earl Grey believes that Canada is losing many valuable trade opportunities by reason of her failure to keep closely in touch with the

situation, and thinks the time has come when the Association, or some similar organization, should put an energetic agent in the field to solicit orders. The matter is being carefully investigated and will be reported on at a later meeting.

Brussels Sugar Bounty Convention.

While the replies received from interested members in response to enquiries sent out regarding the above matter were not numerous, they almost unanimously favored a continuance of the treaty of 1903, whereby the dumping of foreign, bounty-fed sugar has been discouraged. The Secretary has accordingly been instructed to write the Secretary of State for the Colonies, expressing the hope on behalf of the Association that he will see fit to favor a continuance of this salutary measure.

South American Swindlers Exposed.

From information received from various quarters it is apparent that a systematic attempt is being made by a firm in Buenos Ayres to swindle Canadian manufacturers out of small amounts by means of a cleverly planned scheme. The method employed is to send along a rush order for goods worth anywhere from $200 to $500, accompanied by a ninety day draft on a house in Madrid, Spain. The draft, of course, is promptly accepted in the expectation that the goods will be shipped without further delay. Before the draft matures, however, the Spanish house closes its doors and quietly disappears, leaving the shipper at the mercy of a dishonest consignee thousands of miles away. As the plan is the same as one followed with some success on a small scale a year ago by parties bearing the same name, your Committee has thought it advisable to give some publicity to the facts, and to advise all members to exercise extreme caution in dealing with the parties concerned.

Statistics of Imports.

A copy of the new classification of imports recently received indicates that about one-half of the recommendations made by your Committee to the Department have been adopted. Inasmuch as the recommendations were made before the new tariff was brought down, it is recognized that in some instances it was difficult or impracticable to grant all that was asked for. Your Committee feel, however, that a number of changes could still be made to advantage, and propose taking the matter up again with the Department with a view to having them effected.

Industrial Census, 1906.

The Dominion Census Commissioner, Mr. Archibald Blue, has written the Association to say that he will be glad to have the benefit of our suggestions in compiling the figures and tables of comparison for the Industrial Census of 1906. The Secretary has been instructed to discuss the matter personally with Mr. Blue, and to find out the particular lines along which the Association can be of assistance. Upon receipt of this information your Committee will go into the matter very fully so that the census report may be compiled in the manner best calculated to meet the requirements of manufacturers generally.

Mr. Rowley called attention to the inaccuracy of the statistics of Canadian exports caused by the fact that the destination was very often concealed when going through New York export houses, and enquired whether the Committee were taking steps to remedy this difficulty as far as possible.

The Secretary explained that the Department of Trade and Commerce were fully alive to the situation, and were putting forth their best efforts to get the information in correct shape.

The adoption of the report moved by Mr. J. P. Murray, seconded by Mr. C. H. Waterous, was then carried.

PARLIAMENTARY.

Mr. R. S. Gourlay read the report of the Parliamentary Committee. The following are the principal items dealt with.

Damages for Enticing Apprentices to Leave Their Employment.

It had been brought to the attention of the Committee that an action for damages had been brought by one member of the Association against another for enticing indentured apprentices and workmen under contract to leave their employment and to look elsewhere by the offer of better wages and free transportation. As the action was eventually won by the plaintiffs, with damages assessed at $2,000, the Committee recommended that for the information of members generally the facts be published in INDUSTRIAL CANADA without mentioning any names.

Scarcity of Labor.

A resolution was submitted regarding the immigration of skilled workmen, coupled with a recommendation to the effect that it be placed at once in the hands of the Government. It read as follows:—

> WHEREAS, it is necessary for the permanent development of Canada and in the true interests of all its citizens that the manufacturing, farming, lumbering, contracting and other industries of the country should be able to procure a sufficient supply of skilled and unskilled labor to produce and manufacture as far as possible what is required for home consumption and to increase our exports abroad;
>
> AND WHEREAS, the rapid growth of new settlements and industries throughout the country, the mining camps, the enormous railway and other construction in progress or in prospect are withdrawing a constantly increasing number of skilled and unskilled men from the older parts of the country, who are greatly needed in the factories, as well as on the farms of these districts;
>
> AND WHEREAS, employers are prevented by the Alien Labor Act from bringing workmen from the United States, and our Government Immigration Agents abroad not only do not encourage, but in effect discourage immigration to Canada of skilled artisans;
>
> AND WHEREAS, the scarcity of good workmen, both on the farms and in the towns and cities, has become a matter of public notoriety which cannot be gainsaid;
>
> RESOLVED, that the Dominion Government be respectfully urged to encourage, through its present immigration officers and by the appointment of special representatives for this purpose, the immigration not only of farm laborers, but also of skilled mechanics, where opportunities are known to exist, and thus assist in building up our national industries.

The adoption of the report moved by Mr. Gourlay, and seconded by Mr. Gillies, was carried.

TARIFF.

The Chairman, Mr. W. K. George, presented the report of the Tariff Committee. It referred to the despatches current in the press to the effect that negotiations were under way between Canada and Germany for mutual tariff concessions, and stated that, after careful investigation, the Committee was satisfied that these reports were without foundation. Should it be ascertained later on that the Government was seriously contemplating such arrangements, the Committee would take the matter up vigorously.

Mr. George moved, and Mr. McNaught seconded, the adoption of the report, which was carried.

RAILWAY AND TRANSPORTATION.

The report of the Railway and Transportation Committee was read by the Chairman, Mr. J. H. Housser, as follows:—

Readjustment of Rates.

The Department reported that advice had been received that the Board of Railway Commissioners, on receipt of the resolution adopted in regard to the readjustment of rates, as already reported, had given the railways fifteen days in which to reply thereto. Your Committee are of the opinion that, in view of the fact of their having agreed to a temporary compromise on the understanding that there would be an early adjustment, this important matter should be disposed of without further delay, and are taking action to that end.

Bills of Lading.

The objections of the Association to the draft of general terms and conditions of carriage as submitted by the railways to the Board of Railway Commissioners were filed with the Board. The resolution as adopted at the last meeting was printed and sent out to the principal Boards of Trade and kindred Associations throughout Canada, with the result that communications have been received to the effect that similar action was being taken by them. The Department was instructed to urge the matter upon the Board of Railway Commissioners so that this important subject may not be permitted to receive any further delay.

Express Rates.

In view of the representations made to the Board of Railway Commissioners, the time for the approval of tariffs and classification as submitted by the Express Companies has been extended from May 1st to July 1st, 1907. As reported at the last meeting, the Department communicated with the Railway Commission, pointing out the importance of a thorough investigation before any tariffs were approved of. We are advised that the Government has appointed counsel for this purpose, and an investigation is now being made in order to ascertain whether or not the tariffs submitted are fair and equitable.

Toronto Interswitching.

This matter was reported at the last meeting, and the Department was instructed to delay taking the matter before the Board of Railway Commissioners until a reasonable time had been given to the traffic official of the Grand Trunk Railway, who had been communicated with, to reply. A reply was received to the effect that the Grand Trunk Railway would not change its position. A formal complaint was, therefore, drawn up, and has been filed with the Board on behalf of the Toronto Branch of the Association, asking the Board for an order directing the Grand Trunk to cease from charging and collecting switching charges at Toronto on such traffic as they term "local" or "non-competitive," and to continue the arrangement which was in effect for interswitching prior to March 1st, 1907, in the same manner as it already existed.

Classification 13.

The Department reported that some time had been spent in checking over this classification with a view to having it come into effect at the earliest possible date.

Mr. Henderson enquired what the Committee was doing in connection with the shortage of cars. He stated that he believed this to be one of the most important subjects before the shipping public to-day, and the matter should be prosecuted vigorously to see if some relief could not be afforded.

The Chairman of the Committee explained that the matter had already been brought to the attention of the Board of Railway Commissioners by the Association, and that everything possible was being done to force the railways to provide the necessary equipment.

The President assured Mr. Henderson that he was not the only one who was suffering, that the condition was general all over Canada.

Mr. Rowley enquired whether the Association was actively following up the question of the uniform bill of lading. The Manager of the Transportation Department explained that the Association had taken the initiative in this respect; that they had not submitted a counter bill of lading to the one submitted by the Railway Companies, for the reason that they had not been invited by the Board to do so.

Mr. Waterous enquired whether the Department had given any consideration to the question of cars delayed in transit, stating that this was another feature of the car shortage situation, which ought to be carefully looked after.

Mr. Robins expressed the belief that the railways were simply in the same condition of congestion that nearly all industries were in, that business was very strenuous, and that the companies could not supply what they did not possess.

This view was concurred in by the President and Mr. Housser, and also by Mr. J. F. Ellis, who cited instances of delays in the unloading of cars in the Toronto yards. Mr. Karn referred to the case of a shipment made by his company which had been delayed a whole month in the Winnipeg yards, and thought that when the railways were exacting fines from shippers who exceeded the customary time for loading or unloading something should be done to retaliate upon the railroads for delays in forwarding freight.

The President stated that he had recently sent the C.P.R. a bill for over $200 to cover expenses incurred in tracing cars along the north shore. The railways had not refused to entertain the claim, although they had stated that it was quite unprecedented, and the President believed that if more members would adopt the same policy the railroads would be forced either to pay the claims or to improve the service.

Mr. Flavelle expressed the opinion that relief would never be forthcoming until the Association pressed vigorously for reciprocal demurrage, though Mr. Tindall, on behalf of the lumbermen, stated that he thought the Association had gone as far as it could reasonably be expected to go on this question.

The adoption of the report moved by Mr. Housser, seconded by Mr. Vandry, was then put and carried.

INSURANCE.

The report of the Insurance Committee was read by the Chairman, Mr. W. B. Tindall. It reviewed the progress which had been made to date in connection with the formation of the Mutual Fire Insurance Companies, and the success which had been met with in endeavoring to secure the requisite amount of business. It stated that, in the opinion of the Committee, the only way to get business within a reasonable time was to place a man on the road to solicit it, and it recommended that Mr. B. L. Anderson be relieved from his duties on INDUSTRIAL CANADA for three months to undertake the work.

Other matters embraced in the report of this Committee were as follows:—

Deputation of Insurance Companies to Ontario Government.

The Committee has had under consideration the announcement made in the daily press of the 3rd of May, that a deputation of managers and representatives of the Fire Insurance Companies waited upon the Attorney-General for the Province of Ontario with a view to securing amendments to the Ontario Insurance Act by which all permits given by the Provincial Insurance Department to place business in unlicensed companies should be published with full details, and also that a tax be imposed on the premiums on all risks placed in companies not licensed to do business in the Province. We are given to understand that the requests of the companies will not be conceded, but the Committee will watch any legislation that may be introduced on the subject at the next or any subsequent session of the House.

Ignition of Benzine by Printers for Warming Presses or Cleaning Cuts.

A matter affecting printers has been brought to the attention of and dealt with by the Department. It appears to be a custom among a number of the printers to ignite benzine or use direct application of other fire heat for the purpose of warming up presses or cleaning cuts. While an employee of a member was pursuing this practice a small fire resulted and caused some little damage, which one of the companies paid under protest, but only after advising the assured that the companies were not legally liable. If the attitude of the company in this particular case be correct, it is necessary that the practice should be discontinued or the fire insurance policies made to protect indisputably the assured. The committee obtained legal advice on the point, and communicated the same to all the members interested.

In moving the adoption of the report, which was seconded by Col. MacLean, Mr. Tindall coupled with it a motion to the effect that the Council authorize the Treasurer to advance the necessary funds to meet the department's overdraft.—Carried.

RECEPTION AND MEMBERSHIP.

The report of the Reception and Membership Committee, read by Mr. L. V. Dusseau, recommended for acceptance twenty applications, the names of which will be found in another column.

It announced that a draft circular had been approved of, which would be sent to members, setting forth in concise form the results achieved by the various Committees during the past three months; that this would be accompanied by a printed list of eligible manufacturers, and a general appeal would be made to members to help in securing applications from these parties.

It recommended that the Convention be held on September 24th, 25th and 26th. It also suggested that the Secretary be instructed to attend the Convention of the National Association of Manufacturers.

BRITISH OFFICE.

In the absence of the Chairman, Mr. Geo. W. Watts, the report of the British Office Committee was read by the Secretary. It presented an analysis of the applications for help received to date, showing that out of 706 workpeople applied for 100 had been engaged and shipped by May 4th.

Supporting the resolution contained in the report of the Parliamentary Committee, it suggested that an effort be made to have the Government instruct its Immigration Agents in the United Kingdom to advise any skilled workmen applying at their offices of the existence of Mr. Leopold's office.

Mr. Burton enquired whether the Association had made any arrangements to place immigrants who had not taken the precaution to procure a situation beforehand. The Secretary explained that he was in constant communication with societies like the Central Emigration Board, the Salvation Army, and the Baron de Hirsch Institute, and always did the best he could to assist people of this kind to a situation, though he had no instructions from the Council to do so.

BRANCHES.

The report of the Montreal Branch was read by Mr. J. H. Sherrard, and that of the Toronto Branch by Mr. J. S. McKinnon, both of which were received, and will be found elsewhere.

On behalf of the Quebec Branch Major Hethrington stated that they were giving considerable attention to the smoke nuisance and the new smoke by-law, which it was proposed to adopt in that city.

At the conclusion of his remarks the meeting adjourned.

MONTREAL BRANCH.

At the regular monthly meeting of the Montreal Executive Committee on May 9th the advisability of measuring the stream flow in the Province of Quebec was considered, and it was decided to request the Executive Council to include the Province of Quebec when petitioning for a survey and collection of data in regard to water powers; and if necessary the Montreal Branch would gladly undertake to present such a petition to the Quebec Government.

Arrangements are now being made to hold the Annual Meeting of the Montreal Branch on Thursday, June 27th.

At a special general meeting of members of the Montreal Branch on April 17th, Mr. J. E. Walsh, manager of the Transportation Department, explained the stand taken by the Association in regard to the Bill of Lading proposed by the Railway Companies. A resolution was unanimously passed endorsing the action of the Railway and Transportation Committee in asking for a clean Bill of Lading from the Railway Companies.

The Montreal Branch, along with the Montreal Technical Institute, held an open evening in the new Technical and Commercial High School on April 25th. At this meeting it was decided to collect a guarantee fund, and if sufficient support were forthcoming to open regular classes next September. The use of the school building in the evenings has been kindly granted by the Protestant Board of School Commissioners for the mere cost of lighting, heating and maintenance. Quite a number of subscriptions have already been received towards the guarantee fund.

TORONTO BRANCH.

The regular monthly meeting of the Toronto Branch Executive was held on May 9th.

American Foundrymen's Association.

Mr. L. L. Anthes, Vice-President of this organization for Canada, briefly addressed the meeting, stating that the American Foundrymen's Association were contemplating holding their 1908 Convention in Toronto, and suggesting that the Branch should extend them a welcome. As several foundrymen throughout the Province had expressed the wish that the Convention come here, and promised their support to make it a success, it was decided to write the Secretary of the organization, approving of their choice of Toronto as the scene of their next Convention, and assuring them of a hearty welcome from Toronto manufacturers when they came.

Female Labor.

The Secretary reported the result of investigations carried on with a view of ascertaining the extent of the dearth of female labor in Toronto and other manufacturing centres of Ontario. Results proved that Ontario manufacturers could probably employ 25,000 more girls in their factories if such could be obtained. There seemed no possibility of meeting the demand by importing girls from non-manufacturing districts to those where their labor was urgently required, and a small committee of the Branch was appointed to confer with the Salvation Army officials with a view of having that organization bring out a large number of the girls from the Old Country, who would relieve the situation throughout Ontario. From a conversation with the head of the immigration department of the Salvation Army it appears that there will be no difficulty in bringing out girls if the manufacturers can supply boarding houses when they arrive.

Convention Arrangements.

Preliminary arrangements for the Convention are well in hand. The Entertainment Committee has met and purposes to arrange the following entertainments: A public reception at the City Hall on the first night; a theatre party on the second night; an automobile trip for the ladies on the second afternoon, terminating at the Lambton Country Club; and a garden party on the third afternoon. Something may be arranged for the third evening for the ladies while the banquet is on.

The other committees will report at the next meeting of the Branch.

Branch Annual Meeting.

It was decided that the Annual Meeting of the Branch should take the place of the regular monthly meeting of the Branch Executive in July.

NEW MEMBERS.

HALIFAX, N. S.

Hillis & Sons, Limited.—Stoves and Ranges.

KINGSTON, ONT.

Ontario Powder Company, Limited.—Dynamite.

MONTREAL.

The Canadian Bleaching and Dyeing Co.—Bleachers and dyers.

C. R. Corneil.—Printed matter.

The Denver Chemical Mfg. Co.—Antiphlogistine.

The Hall Engineering Works.—Engines and boilers.

L. Martineau and Cie, Limited.—Candies and chocolates.

The Standard Paint Co. of Canada, Limited.—Ruberoid roofing and P. & B. products.

NIAGARA FALLS.

Canadian Ramapo Iron Works, Limited.—Railway material.

NEW GLASGOW, N. S.

The Humphrey Glass Co., Limited.—Glass.

Johnson & MacDonald.—Corn meal and feeds.

Wm. P. McNeil & Co.—Structural iron work.

ST. HYACINTHE.

Augustin & Daudelin.—Machinery.

O. Chalifoux & Fils.—Threshing machines, hay presses, small board mills.

ST. JOHN, N. B.

John Kimble & Son.—Wool, hides, etc.

TORONTO.

Chemical Laboratories, Limited.—Chemicals.

The Imperial Plaster Co., Limited.—Hydrated lime, plaster paris.

Chas. C. Punchard & Co.—Hats and caps of all kinds made in cloth.

Geo. Coles, Limited.—Confectioners.

TORONTO JUNCTION.

The VanBever Packing & Provision Co., Limited.—Packing house products.

Coal Loses Gas When Stored.

When stored in the air for some time, bituminous coal loses a considerable quantity of gas, the amount so lost being increased when the coal is small and is in a damp state (with 12 to 15 per cent. of water), as is the case in storage towers. From a number of experiments performed by the author, it appears that the average loss of weight sustained by the coal in a week is about 1.7 per cent. Now in a cokery of 50 ovens to be emptied and refilled daily, each with a charge of 7 tons of coal, it is necessary to keep a stock of 700 tons of coal in order to insure regular working. This quantity will lose 10 tons of gas in 48 hours, equivalent to a loss of 1,879 tons of gas per annum, and corresponding to a considerable diminution in the output of by-products. The loss of ammonia is specially apparent, the coal used by the author containing 1.37 per cent. of nitrogen, about 50 per cent. of which is recovered as ammonia when the coal is used fresh. Moreover, the loss of gas is attended with certain difficulties in the management of the ovens; for instance, the heat can only be uniformly maintained when there is a sufficient volume of gas available, and when this is absent, the fluctuations of temperature cause unequal strains in the brickwork, which then becomes liable to crack.

Still another drawback of storing the coal is that the coke is never first-class as regards size, the presence of an abundance of gas greatly facilitating the coking of the coal in the oven. Wedding explained the phenomenon of coking by the assumption that the hydrocarbons in the coal are decomposed at high temperatures, ethylene, for instance, being split up into carbon methane, the small particles of this carbon then cementing the small lumps of coke together. When the coal is poor in gas, the formation of these particles of carbon in sufficient quantity is precluded, the coal cracks and powdered coke is the result; more labor being required to sort out the spongy lumps from the hard, reson-

ant, good coke, to say nothing of the soft coke breaking to pieces in transit and giving rise to complaints on the part of the consumer.

THE MOST ECONOMICAL MEAN EFFECTIVE PRESSURE FOR STEAM ENGINES.

The following are the summarized conclusions of Mr. R. Roads on the above subject.

The higher the mean effective pressure the lower will be the first cost of a steam engine of any given power.

For multiple expansion unjacketed condensing engines, using saturated steam at about 165 pounds per square inch absolute in the engine cylinder, the best mean effective pressure for normal load is from 40 to 45 pounds per square inch, referred to the L. P. cylinder, and the economy varies but slightly for a considerable range in the mean effective pressure.

For jacketed multiple expansion condensing engines with steam pressure as above, the best mean effective pressure is slightly lower than for unjacketed multiple expansion condensing engines.

Non-condensing engines have a best mean effective pressure rather higher, and the variation in economy for any given range of mean effective pressure is less than for condensing engines.

For steam pressures higher than 165 pounds per square inch absolute, the best mean effective pressure is higher than from 40 to 45 pounds per square inch, and is probably as high as from 45 to 50 pounds per square inch referred to the L. P. cylinder, for triple or quadruple expansion engines using saturated steam over 200 pounds per square inch boiler pressure.

Multiple expansion engines using saturated steam below 165 pounds per square inch absolute, have their best mean effective pressures below 40 to 45 pounds per square inch, and this best mean effective pressure falls more rapidly with fall of steam pressure for the condensing than for the non-condensing engine.

The more economical an engine can be made, the lower is likely to be the best mean effective pressure, though not to any large extent. Hence large engines may have a rather lower best mean effective pressure than small engines using steam at the same pressure.

Engines using highly superheated steam, so that the steam is superheated during expansion, have a best mean effective pressure lower than for engines using saturated steam, with a consequent increase in first cost for any given power. Such engines, however, have a high thermal efficiency, and will maintain the same efficiency over a wide range of power.

The best mean effective pressure is about 35 pounds per square inch for single cylinder condensing non-jacketed engines using saturated steam at about 75 pounds per square inch absolute. For other conditions the same general laws hold good for the multiple expansion engines.

The curves of steam consumption per horse power hour have been obtained by first plotting the total steam consumption on a horse-power base, correcting these, where necessary, by drawing a mean line through the points. The steam per h.p. hour values were then calculated from this mean line, and may not exactly correspond with the values tabulated by the various experimenters whose results have been used.

The ratio of expansion, or number of expansions, has purposely been kept in the background, because results can be dealt with more easily and comprehensively by considering the mean effective pressures.

Which?

Of the trade policies advocated by the leading dailies in Canada, which do you wish will be Canada's future policy?

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Aside from its editorial support of the manufacturers' interests, THE MAIL AND EMPIRE devotes a page every Saturday to the

Industrial Progress of Canada

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We would be pleased to write up and illustrate your factory as an example of what progress is being made in our fight for a bigger and more prosperous industrial Canada. Write us.

The Mail and Empire.

ADVERTISING DEPARTMENT.

For Mechanics Wanted, The MAIL & EMPIRE'S want columns are very useful—Try.

The most economical mean effective pressure is influenced by the variation of first cost with variation of mean effective pressure, but no particular account has been taken of this. Also, the character of the load, that is, whether variable or fairly constant, will have an influence. For example, an engine which is subjected to frequent and long continued over-loads should never have a lower mean effective pressure for normal load than a similar engine which is nearly always working at the normal load.

Producing Light Metal by Electrolysis.

An improved process of producing light metals by electrolysis have been invented. The invention avoids the difficulties heretofore encountered in the efforts to electrolyze fused salts of light metals by use of soluble anode. By a "soluble" anode is meant one which is attacked by the chlorine or other electronegative element which is liberated at the anode to form a chloride or other salt of the heavy metal.

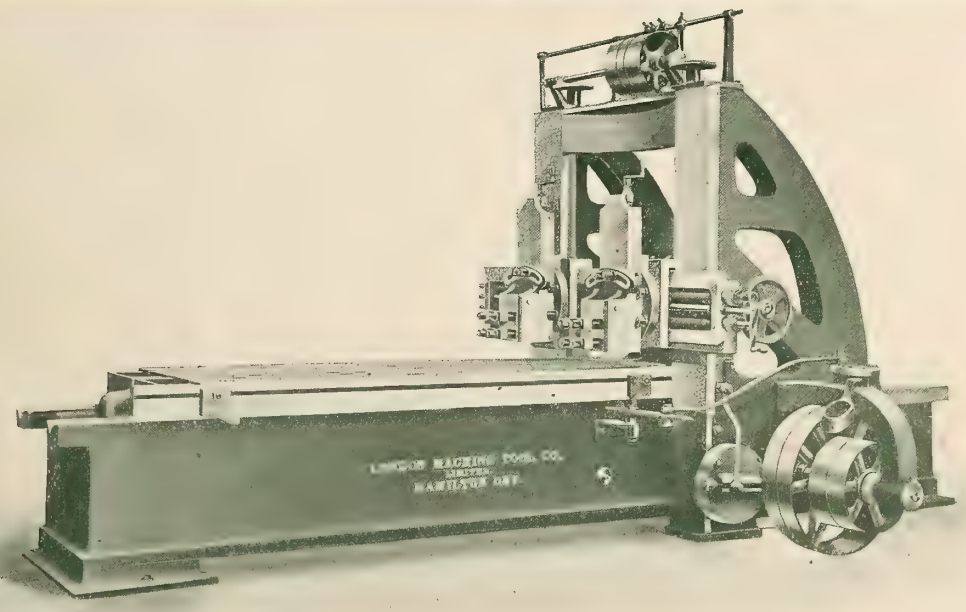
If such heavy chloride of the anode metal can be kept from rising up to or near the cathode the separation of the heavy metal at the cathode with its accompanying losses can be avoided.

This involves the electrolysis of a haloid or other salt of a light metal by use of a soluble anode beneath of molten heavy metal and a cathode above, maintaining such conditions as to prevent the salt of the heavy metal from circulating upward through the electrolyte far enough to come into contact with the cathode or so nearly adjacent thereto as to be decomposed and separate the heavy metal of the cathode.

Vol. VII. No. 12 JULY, 1907 $1.00 per year

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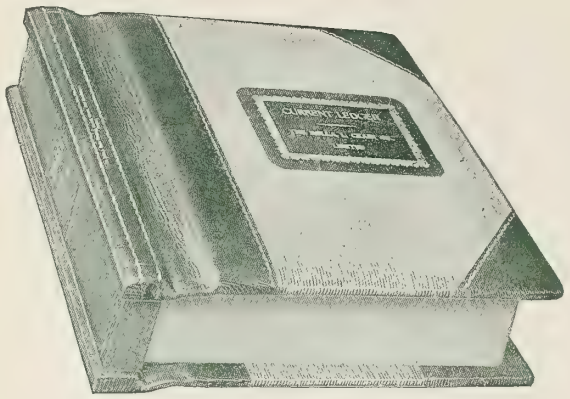
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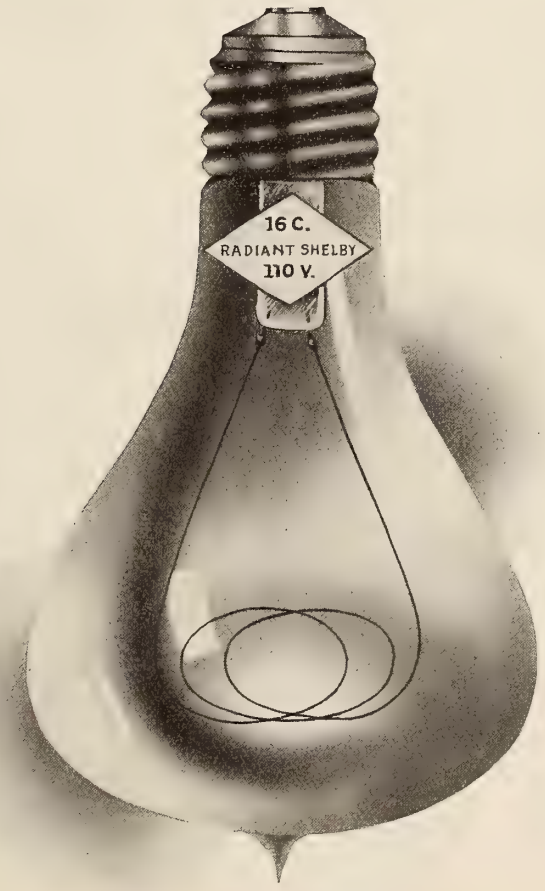
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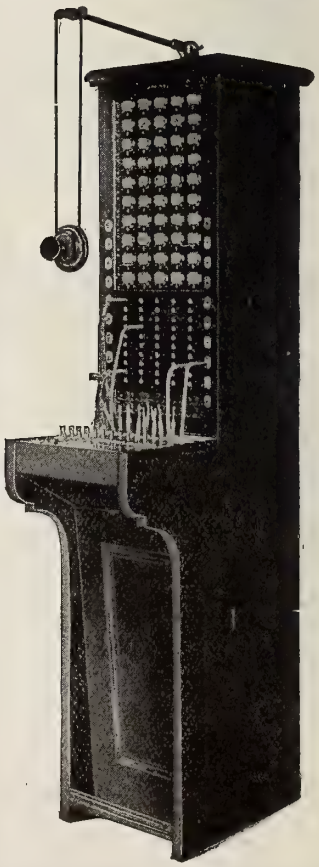
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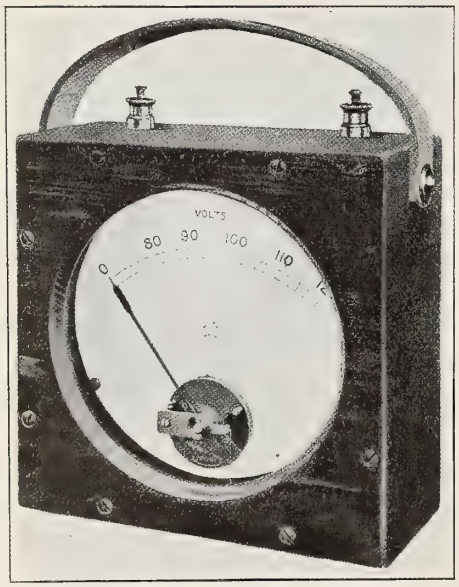
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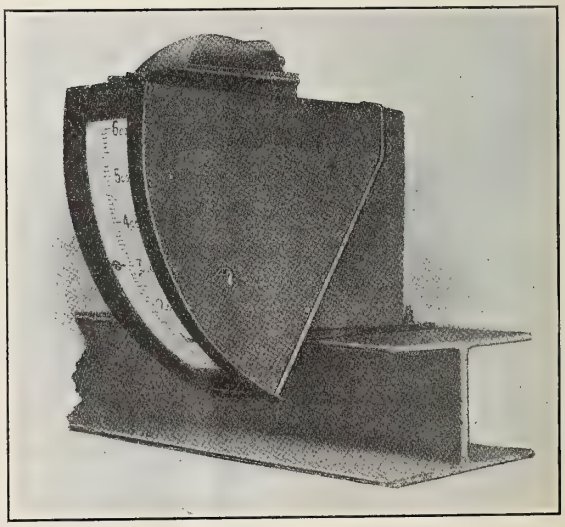
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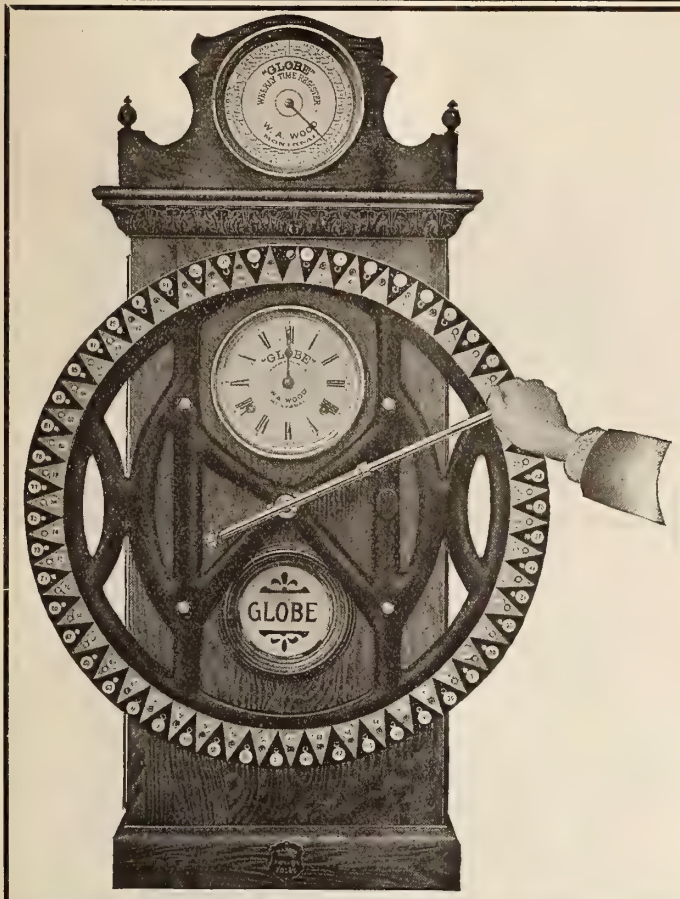
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Paris Plow Co., Limited, The, Paris
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Peterborough Canoe Co., Limited, The, Peterborough
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Smith, The David, Engraving & Litho. Co., Toronto
Smith, E. D., Winona
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Spramotor Co., The, London
Stanley, Frank, Toronto
Sterling Bros., Limited, London
Stevens Company, of Galt, Limited, The, Galt
Stewart Company, Limited, The, Toronto
Sylvester Mfg. Co., Limited, The, Lindsay
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Telfer Bros., Limited, Collingwood
Tolton Bros., Limited, Guelph
Tune, J., & Son, London
Union Card & Paper Co., Montreal
Walkerville Brewing Co., Walkerville
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Whyte Packing Co., Stratford
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Wilson, James, Merritton
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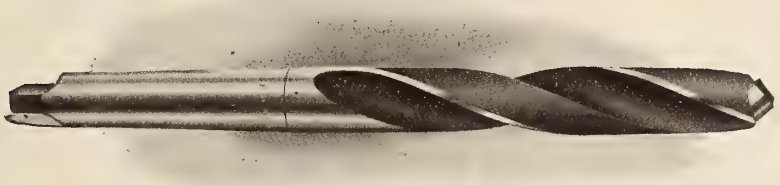
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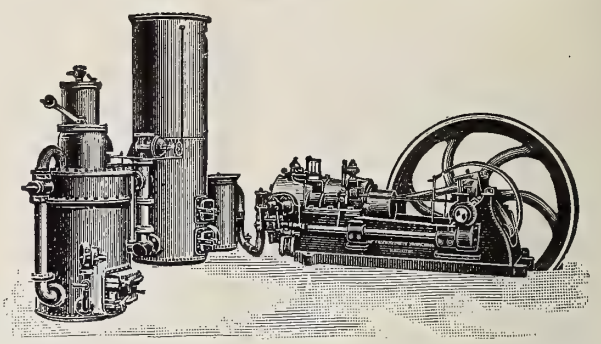
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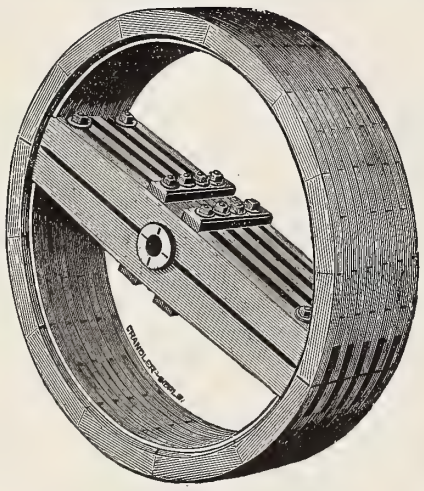
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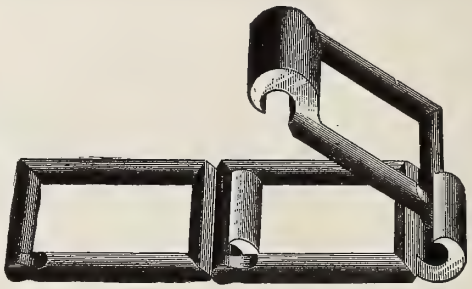
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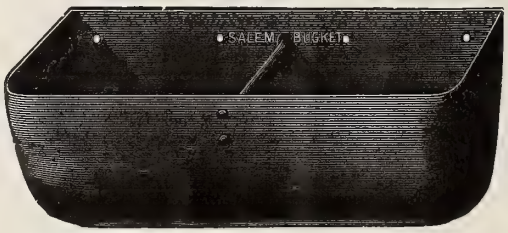
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INDUSTRIAL CANADA

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INSIDIOUS TARIFF SUGGESTIONS.

SIMULTANEOUSLY with the report of the German desire to establish closer trade relations with Canada appears an article in the New York *Journal of Commerce* forecasting a turn in the tide of prosperity of that country. In other words, when Germany finds that the time is approaching when the home market will not consume the products of her factories, she turns to other quarters, where she may unload her surplus supplies. At such a time a young country like Canada may well be on the alert lest reciprocal arrangements lead to the destruction of those industries which it has taken years to develop. Germany recognizes the importance of the Canadian market. If, in order to preserve prices at home, it became necessary to slaughter goods in foreign markets, no country would be more suitable for the purpose than Canada. Therefore, an agitation is on foot looking towards the admission of German goods at a lower tariff rate than they now enjoy.

What has Canada to gain by closer trade relations with Germany? The reason they apply for it is because their own market gives signs of being glutted. If that be the case, what advantage is it to us to have access to it? Canada's chances of selling anything there would be infinitely small. Through cheaper labor and abundance of it, Germany can manufacture cheaper than we can. Therefore, we can sell her nothing which she can make herself. In years of depression there will be little of anything we have to sell imported.

Our trade returns for the past ten months are not such as to encourage us to lower the bars to any country. As it is, our imports are mounting up at a terrific rate compared to our exports. There appears to be no difficulty in foreign nations selling to us. A lower rate to Germany, and a consequent increased buying from her, would swell the adverse trade balance, which is already serious enough. A debt which is increasing at the rate of seventy-six millions a year needs no special efforts to be put forth to add to it.

A CHANGE OF POLICY NECESSARY.

MEN. Skilled men. Men who can earn good wages. This is the cry of employers from one end of Canada to the other. Machines lie idle while customers grow insistent for delivery of their goods. Plants are not producing to their utmost capacity, because the men are not there to man them. And still the Government refuses to act. Why should manufacturers be thus discriminated against? A bonus is paid to men who will take up land. They are given homesteads. That land has a market value, and it is worth its market value to the people of Canada. The people, including the manufacturers, pay to farmer-settlers the bonus plus the value of the land. This is done because they will develop the natural resources of Canada.

Does not the artisan, the iron-worker, the wood-worker or the spinner develop the resources of Canada? If Canada's steel works produce double what they did before will not the mineral wealth of the country be developed to a proportionate extent? The Government is stifling Canadian industry by its attitude towards the immigrant artisan. It is time for a change in this respect.

THE CASE OF THE METAL WORKERS.

ATTENTION is directed to an article on another page of this issue, in which the results of the case carried on for several years by the Metallic Roofing Co. against the Metal Workers' Union are summarized. This is a cause celebre in labor circles. It is unique in many of the points which have been raised at various stages in its developments, and it has been looked upon as a test case on the eventual outcome of which many other labor disputes depend.

The first great principle established was that the boycott was illegal. Could workmen deliberately ruin a man's business by refusing to work on his products? A fine of $7,500 was a most effective verdict that they couldn't. Again, could this fine be collected from the individual members of the union, and, if so, did this include only a local union or every member of the international body in Canada? This, too,

was decided in favor of the Metallic Roofing Co., and the company is now empowered to go ahead and collect the damages awarded.

The decision in regard to boycotting is of the greatest importance to manufacturers. In the various disputes which have taken place between employer and employe, where the union has been interested, every devisable scheme has been put into operation to force the employer into submission. With little regard for either law or equity the business of the person affected has been obstructed and in many cases seriously affected. But in spite of these troubles there has been a principle of right and wrong, against which argument or violence was alike unavailing. We know that it is wrong, fundamentally wrong, to boycott the manufactures of a man because he exercises the right to employ whom he wishes. This principle is now clearly and absolutely fixed by the courts. It is well that it has been fixed. The boycott was a dangerous and pernicious weapon to leave in the hands of anybody, particularly one that has consistently shirked responsibility by refusing to incorporate.

The Metallic Roofing Co. are to be commended for the fight they have put up. They were fighting, not alone for themselves, but for every employer in Canada. They have continued the fight, too, when it would have meant money to them to have accepted the proposals of the union. The final struggle, which is about to be entered upon before the Privy Council in England, will be watched with the utmost interest by all supporters of freedom of labor.

DO OUR SCHOOLS PRODUCE ARTISANS?

"WHAT we need now more than anything else is skilled workmen." This statement of one manufacturer would arouse an echo in every part of the country. How is this great demand to be satisfied? No inducement is offered to artisans of other countries to come here. A renewed effort must be made to educate our own youth, that they may be able to take their places with the best that any industrial country can produce in skill, inventiveness and intelligence.

The common school education must be brought closer to the life of the country. Our life is essentially one of work. Practically all our people are actively engaged in agriculture or manufactures, developing the natural resources or bringing to perfection the raw material of others. Those who are not directly engaged in these enterprises are in other work which is a necessary adjunct to them.

Hence the main object we must keep in view in the schools is the providing of such training as will best fit the boys and girls to take up this work of material development. Our schools as they now are may provide an excellent edcuation, but if it is not in conformity with our scheme of national life, it will be abortive. No one will say that an education which produces a strong lawyer or other professional man is not an excellent one. But it is excellent for the lawyer and professional man, not for the artisan. And the great majority of those attending our schools must be artisans.

That is the chief weakness of our secondary education now. It aims too much at being a preparation for the university. The fact is that only a very small percentage of the students of the lower schools ever take up university work. Hence the principle upon which the curricula and courses are laid out is fundamentally wrong.

No matter what the work in which we are engaged, we cannot keep too clearly in view the ultimate object of that work. In our elementary schools the aim is to prepare the boys and girls so that they may excel as artisans or agriculturists. To the great majority the work of the elementary and secondary schools is a complete chapter. It is not an introduction to further theoretical investigations. The cry comes back with increasing insistence for intelligent, skilful workmen. Such men are receiving big wages. There is work in abundance for them. It would be a national calamity if, through our schools, the masses of our youth were turned from the practical manual vocations to other lines where the demand is not so great, and where the returns are much less. In a new country the citizens must be material. They must produce goods and barter them. They must delve and build and develop. Everything is in the raw. It must be brought into subjection.

In a recent article Mr. E. G. Cooley discusses a similar situation in the United States. His conclusions are instructive:

"If I were to indulge in a word of prophecy, I would say that the High School of the future will be closer to the people than to the college; that its curriculum will do more for the children of the plain people; that it will make a broader and stronger appeal to, and a better provision for, the boy who has small interest in college, but feels he must 'quit and go to work'; that its course will smack less of those studies which tradition holds to be divinely-appointed agencies for 'mental discipline'; that it will have less of the cast-iron programme, and will less and less attempt to mold all pupils to the same pattern; that it will give culture to those who seek culture, and help all to strike straight for the goal dictated by their own natural impulses, whether that be a business or a profession.

"More than that, it will increasingly put up to the pupil himself the selection of his course and the responsibility of its faithful pursuit. And there is nothing better for the development of character than driving at a fixed purpose with a clear sense of responsibility.

"Our public schools will not be common in the truest sense of the word until these conditions are measurably realized, and until the ability of the pupil to build a gas engine, construct a dynamo or make a difficult chemical analysis is as highly recognized as the ability to translate Virgil or Homer, or demonstrate a tough proposition in geometry."

THE SHORTAGE OF CARS.

WHAT will be the situation in regard to the car supply when the Western crop is ready for shipment this fall? Each year we have the same complaints and excuses, the tying up of business and the mutual recriminations of railways and shippers. But when the crisis is passed for the year, what then? Are honest efforts made to prevent the recurrence of the difficulty? Apparently not. Year after year the situation has grown worse. In face of the statements of the railway magnates we have the Government reports showing that the new equipment is barely adequate for the new mileage, to say nothing of the increase traffic on the roads already in operation. This means that with the same relative amount of freight offering, the car shortage this fall will be more pronounced than ever.

The Railway Commission must now take the matter up. It is given to them to insist on the companies supplying a fair service to the public. In spite of all efforts on the part of the public to secure this, direct from the railways, their position in reference to the supply of cars is steadily growing worse. Some months ago the Chairman of the Board of Commissioners announced that in future extensions would not be approved unless a suitable increase in rolling stock accompanied them. This is very good as far as it goes. But extensions, or no extensions, there must be an increase in the car supply.

Unless some strong measures are taken we shall have this year a recurrence of the conditions which have caused great financial loss and inconvenience in the past. Wheat cannot be piled in the fields, or manufactures stacked in the yard for weeks, waiting for cars, without the country eventually

feeling the effect of it. Abnormal conditions and an unusual demand can no longer be urged in extenuation. When a condition exists for years, it cannot be laid to the door of an unexpected demand. The shipping public expect some redress from the Commission.

DISSIPATING OUR WEALTH.

OUR forests are among our chief national assets. An enormous amount of wood has become an essential element in our progress. As the population of the United States increased, their forest wealth disappeared with great rapidity. Particularly was this the case with pulp-wood. At present the publishers of that country would be in serious difficulties if it were not for the Canadian supply upon which they are drawing. The following clipping from the *Paper Mill* reveals a situation that is deserving of close consideration from the Canadian standpoint :

"Most of the mills in Northern New York are now using at least some Canadian pulp-wood, and many of them are getting most of their spruce supply from across the border. They are turning more and more to it with each year, and are saving their own tracts in the Adirondacks, holding the latter in reserve. This fact in itself furnishes an adequate answer to the claims of the opponents of water storage in this State, who would have it that the pulp men are recklessly cutting every spruce in sight through the New York forests. Nothing could be sillier than this contention. To show the extent this Canadian business is attaining it is necessary only to mention that between five hundred thousand and six hundred thousand cords are annually shipped out of Quebec, the bulk of which goes to mills in the United States. Moreover, the greater amount of this comes to mills in New York State and in New Hampshire, Maine and Vermont. The plants of the International Paper Company use a lot of it in their mills in this State, and in New England, and vast quantities are utilized by such concerns as the Remington-Martin Company and the St. Regis Company, as well as many others. The Canadian pulp-wood trade grows continually. Meanwhile, such concerns as the St. Regis, Remington-Martin and Raymondville Paper Companies have not only their Adirondacks tracts in reserve, but are conducting scientific forestry experiments upon them in order to ensure their perpetuity."

The paper makers of the United States are conserving their own supplies of pulp-wood by importing large quantities from Canada. What does Canada get out of this arrangement ? The total money spent in Canada for a cord of pulp-wood, transportation and all, is a few dollars. By the time it leaves the mill of the pulp and paper manufacturers about twenty dollars a cord more have been expended. Are we making the most of our resources when we allow what is the only practical, available supply on the continent to be carried across the border to be manufactured ?

True national economy consists in this, that a people shall take its raw material and bring it to the highest state of perfection possible. Apply this principle to our pulp industry. Two courses are open to us. One is to fell the trees and sell them across the line to have the skilled labor done on them, after which we reimport them in the form of paper at a great advance on the original value. The other is to employ the men and plants in Canada to turn the trees into pulp and paper. When the case is put up concretely there can be no question as to which is the correct policy. In the one case Canada receives five dollars for a cord of wood, and a few months after pays twenty-five dollars to the United States for the same cord of wood in different form. In the other case, Canada gets the five dollars for the wood; she also gets the rest of the twenty-five dollars, which is represented by labor; and in the end she has the product also. Surely this is the national objective. This is the policy that will keep money in the country ; that will increase our population of highly-paid, skilled workmen ; that will provide an increased home market for our farmers, our shoe manufacturers and our clothiers.

At the present time we are reckless with our forest supply. It is by no means inexhaustible. Each year the cut is increasingly large. We cannot afford to contribute what we have to enrich foreign nations. Our pulp-wood can be the source of great national wealth. To be so it has to be preserved for the nation. A policy is needed which will do away with the short-sighted system of allowing other people to do work which we are eminently fitted to do ourselves. We should manufacture all that we can in Canada.

SWITCHING SERVICE.

THE principal railways have recently reissued their switching tariffs, involving an increase of rates for this service. Not only has there been an increase for the service performed in connection with shipments between points within one railway's terminals, but it applies as well to such traffic as is handled by more than one of the railways, that is to say, interchanged for delivery on some industrial siding upon which the line on which originates the traffic is unable to make delivery. In some instances the charge has been advanced from two dollars and fifty cents to six dollars per car, and it is claimed this has been done without proper notice.

The pre-existing rates and arrangements have been in effect so long that the public have come to regard them as a fixture, and contracts have been entered into based upon their continuance. The result of this arbitrary action on the part of the railways, for it cannot be looked upon in any other light, is apparent.

Surely they are not to be allowed to make such drastic changes without giving sufficient notice to the public to enable it to meet the changed conditions ! This certainly calls for the attention of the Railway Commission, in order that they may fix a reasonable uniform charge for the service.

In agitating for a uniform maximum charge for such service it should be understood that the term "switching service" is intended to apply to the movement of cars by one or more railroads when the traffic has both origin and destination within the switching limits, and not to traffic which originates at, or is destined to, points beyond the switching limits. The latter, regardless of its origin or destination, is entitled to through rates and continuous carriage, as provided for in sections 317 and 337 of the Railway Act, Chapter 37, R.S.C., 1906, and the stopping of such traffic in transit, for the purpose of collecting additional toils, is illegal.

Some of the railways have not only advanced the rate for this switching service, but are exacting an additional toll on such traffic as they term "local" or "non-competitive," which originates on their lines and is consigned for delivery on the tracks of connecting roads, insisting on the prepayment or guarantee of such additional tolls before they will deliver the traffic to the connecting lines.

Notwithstanding the fact that these additional tolls have been collected for some time past, it is only recently that a tariff has been published, in which the attempt is made to legalize these tolls. The issuance of this tariff, by which it is intended to evade the law, as will be noted by its careful wording, does not change the situation one iota. It only seeks to cover a competitive condition which exists purely and simply in favor of the line issuing the tariff, and intended to increase its revenue. This was not contemplated and does not exist within the law. It eventually brings about a discrimination as regards localities and traffic.

Whilst through rates are denied so-called "local traffic," the lines continue to make delivery of the same class of

traffic at through rates, affording continuous carriage without interruption, provided it originates at a point served by another railway. They thus relegate to themselves the right to elect on what traffic they shall or shall not afford continuous carriage. The Railway Act does not contemplate, nor is it expected, that the Railway Commission will permit of such a condition. Section 315 of the Act says: "All tolls shall always in respect of all traffic of the same description be charged equally to all persons." Where is the equality? What guarantee is there that some one is not being favored? This is a matter of vital importance to the shipping public and calls for immediate attention. The public should know just where they stand.

REDUCED TARIFF BRINGS INCREASED IMPORTS.

"THE practical working of the new tariff, as exemplified in the period extending from December to May, has gone to show that the result is a scaling down of the duties which the consumers have to pay." This extract from the *Globe* of June 26th is a striking commentary on the trade returns published by the same paper a day or two before, wherein it appeared that during the period above mentioned Canada's imports had increased enormously, while her exports had shown a merely fractional increase, and even that bid fair to be wiped out in the succeeding months. The two facts presented to us thus side by side, the huge increase in our imports without a compensating increase in exports, and the scaling down of the general tariff during the same period, compel consideration.

For twelve months ending April we imported $76,710,048 more than we exported. We, as a nation, owe on the year's business $76,710,048. This is an enormous debt for six million people. Multiply this by ten or twenty, for the same thing is taking place each year to a greater or a less extent, and we reach an amount that must give us pause. The figures are appalling. Optimism is an excellent quality. But when it induces an individual to assume debts which, instead of decreasing, go on mounting year after year, it becomes a curse. So, too, with a nation.

The apologists of the present condition tell us that the country is developing, that we are, so to speak, erecting the national plant and sinking the shaft, from which will flow hereafter golden profits.

The weakness of the analogy consists in the fact that in the case of the nation the plant can be erected by the nation. The amount of business which will be done in a period of ten years is not unlimited. The cream of it is being done now, in the present period of prosperity. Yet to a large extent this material expansion is being accomplished by foreigners. Wherein is the profit to us? Why should not Canada receive the benefit of the expansion?

There are two difficulties in a young country, both of which must be avoided. One is the reckless development at too great a cost. The other is the failure to take advantage of a manifest destiny. In the case of the individual enterprise, when a man sees business coming his way, he enlarges his plant; but if he is prudent he does so keeping two points well in view. First, in going into debt for extensions he sees that the cost to him, the interest and additional expenses, do not more than eat up his increased production. Secondly, he does not build so extensively that in time of depression—which invariably comes—he shall be carrying a dead weight in inoperative plant, that will counterbalance his profits for years to come.

The same points are to be watched in national expansion.

If the individual, as his business grows, can, in his own factory, make the structural work and fittings, and build from his own products additions as he needs them, he is in a strong position. This is difficult for the individual. But the nation can do so, and the results are just as beneficial.

In the twelve months under discussion we imported goods to a value of $335,398,507. Of these, $203,045,891 worth were dutiable, and so, roughly speaking, we may suppose they were such as could be produced in this country. In buying that much abroad we have been building up the industries of our competitors, developing their natural resources, supplying their farmers with a ready market. Not that we object to prosperity in others. But we object to that prosperity which comes through the impoverishment of Canada.

BUSINESS METHODS IN CIVIL SERVICE.

THE Canadian Manufacturers' Association will join with the Toronto Board of Trade in presenting a memorial to the Civil Service Commission, praying for a reform of the service, so that appointments will be made as the result of competitive examinations, and on the real merit of the candidate. There is a growing feeling that the civil service should be manned in the interests of the public, not of the place seekers, who are unfortunately a concomitant of every political party. Customs officials and others of a similar nature are doing work which has a direct bearing on the commercial life of the community. There are too many busy men dependent upon these officials to tolerate incapacity. There are certain positions, such as country postmasterships, which cannot be brought under an examination system. But the majority of offices, the ones with which the public have much business, might fairly be filled according to the one standard of personal suitability for the position.

The subject of civil service reform is of particularly live interest to business men. The present system affects the whole people, in that it is bad in principle and introduces an element into politics which is the direct antithesis of public spirit or high-mindedness. Professional politics in the lower sense of the term is degrading to the whole people, in keeping constantly before their eyes an unworthy ideal, the conception of public service merely as a means to party patronage. Suspicion of the motives, even of the best citizens, follows their entrance into political life.

In addition to this objection to the patronage system on ethical grounds, there is strong objection to it from a business standpoint. A service which is recruited as under the present system, is bound to be inefficient. There is no pretence of making appointments through any inherent good qualities of the appointee. His ability to influence votes is the test. Not that there are not good men in the Canadian civil service. In several notable instances they combine a high order of efficiency and courtesy, which makes it a pleasure to do business with them. It is not against these that criticism is directed.

Inefficiency in an official, means a loss of dollars and cents to the public. If the service is slow, if mistakes occur, if entries are made inaccurately, or papers drawn badly, there is loss of time and money. No one who has had dealings with government offices has failed to notice the lack of business methods which frequently prevail. The public take it patiently; they have come to expect it. Similar treatment by a business firm would bring strong and instant reprisals. People know how appointments are made, and they excuse the appointee.

But we might just as well have a good service. It would have to be introduced gradually, but that ultimate success is practicable is proven by the countries where the merit system is in force. A people cannot afford to have their official business transacted in a loose and careless manner. The movement, which has been under way now for some years, and which has been gathering strength as it advances, will commend itself to all thinking citizens. The adhesion of the Toronto Board of Trade and the Canadian Manufacturers' Association gives it the undoubted sanction of the business element.

Comment of the Month

Technical School at the Sault.

A special grant of $5,000 has been made by the Ontario Government towards the establishment of a technical school at Sault Ste. Marie. Such a school at the Sault will have great possibilities for good. This is the centre of industrial life for an extensive country. The immense industries which are in operation there require many skilled workmen. We cannot always depend upon other nations to educate workmen for us. The demand is growing here by leaps and bounds. Some steps must be taken to keep up the supply. If the school is conducted on wise principles it will have an influence, not only on those who get an education at it, but also on the many educationalists and employers of labor who are watching closely every effort to bring the national education into harmony with our national requirements.

Trusts in Free Trade England.

It is announced that a steel trust has been formed in Great Britain. We no longer give more than passing attention to such pieces of news. They have been coming so fast of late. There is the thread trust, and the shipping trust, and so on through a considerable list of the industries of free trade Britain. Yet at the suggestion a few days ago that a trust had been formed in this country the hands of free traders were thrown up in holy horror. It was another example of the results of the insidious tariff we enjoy.

It should have been driven into the understanding of even the most perverse opponents of protection, by this time, that trusts are not peculiar to countries which have a protective tariff. The recurrence of that argument is just as regularly met by the formation of just such a business organization, under circumstances which the tariff could not effect or be responsible for. Every argument which has ever been urged to prove that free trade and trusts are incompatible might be put forth in this case. The freedom of competition, the cheapness of labor, all the stock phrases are as true as they ever are. Yet a trust exists; and workmen are out of work and in poor conditions. If trusts must exist, let us have with them well-paid workmen and comfortable circumstances.

Employers' Help.

With this issue we embark in a new field of activity, which, it is expected, will be of great service to our members. The new field is really a branch of our lately organized Labor Department, and will take the form of a regular column, to appear every month, to be known as the "Situations Vacant" column. Under this heading will be found a list of all those mechanics, and other classes of workmen, for whom Mr. Leopold, our London Labor representative, has no definite opening in Canada, but who wish to come to this country if they can secure work at their trade.

The column will be conducted along lines similar to those at present employed in the "Trade Enquiries" column. Members wishing further particulars about any applicant will apply to the Secretary, at Toronto, by number, when full information will be forwarded, together with copies of testimonials, where the applicant has such. Those using the column are requested to state wages paid, whether work will be permanent, and to give such other information as they consider pertinent. For help procured through this agency the regular charges of the Labor Department will be made.

In view of the continued scarcity of skilled help, which all manufacturers are suffering from, this column should prove of great value to our members. Look for the heading, "Situations Wanted," in the middle of the journal.

"Made in Canada" in Mexico.

That the present is Canada's time in Mexico for the development of export trade, is proved conclusively by the number of trade inquiries received at this office from Mexico each month during the past year. Since January 1st they have averaged easily a dozen a month, and call for all kinds of Canadian goods. Many manufacturers have already a good business in Mexico, and we know of several others who are fast embarking in this new and profitable field.

Evidently Canadian goods are well known already, and judged to be of considerable merit, for last week a letter was received from the Canadian Commercial Agent in Mexico, Mr. A. W. Donly, asking for one hundred and fifty "Made in Canada" cards, which he wanted for distribution among Mexico merchants. Let the good work continue. Canadian houses should strive hard to build up business in this very accessible market. In this connection it may be mentioned that Mr. Donly is coming to Canada for the summer months, in the interests of trade, and we would recommend all those interested in Mexican trade to get in touch with him on his arrival at Ottawa. He will address a meeting of the Association on a date to be arranged later. Letters will reach him if addressed care of the Superintendent of Commercial Agencies, Ottawa, where he arrives about July 10th.

Delays in Transit.

Complaints of delays in transit have been so general and numerous during the past year, without any guarantee of improvement in the near future, that the Association has been compelled to appeal, at different times, to the Board of Railway Commissioners for relief.

The Association, recognizing the situation during the past winter, refrained from taking any action that might seem to harass the railways in any way. There is probably not one member of the Association that has not suffered in one way or another. One firm reports a few of the delays as follows: One car in transit 100 days, another 131 days, a third 94, a fourth 98, a fifth 86, and a sixth car 101 days. All were shipped about the same time from Eastern Ontario, consigned to points in the North-West, intended for the spring trade. They arrived too late, and as a result the sale was lost. This is only one of the many complaints received.

Some of our large manufacturers have been compelled to send out their own men in order to trace their cars to destination, thus entailing considerable expense.

There are not only delays in transit, but consignments of package freight are delayed in the forwarding; that is to say, after shipments are received by the railway companies at their freight sheds they are allowed to remain there for several days before they are started for their destination.

Serious complaints have been made as to delays in placing of cars on team tracks, as well as in the delivery of package freight, which is carried by the railway companies' agents.

It is time that there should be some improvement in the freight service, and the railways should be compelled to furnish reasonable and adequate facilities to do the business of the country. Some explanation is due as to the present situation, and there should be a guarantee of more efficient service in the near future. Traffic has increased enormously and will continue to increase. The railways are fully alive to this, but apparently so far have not taken sufficient steps to meet the situation.

The tendency has been to increase their mileage without a corresponding increase in equipment. The Board of Railway Commissioners have said that they might be forced to consider the advisability of ordering that no new lines be commenced until such times as the present ones were properly equipped. They now have experts inquiring into the conditions of the railway companies. It is expected that some information will be forthcoming at an early date. It is absolutely necessary that we should know what to expect in the future.

The Extent of Our Mines.

The Department of Mines at Ottawa is recognizing the importance of that branch of Canadian industries by collecting a large mass of information regarding the mines which are actually being developed. This will be published as soon as possible in an official return. The inquiries will be on the mining and metallurgical industry of Canada, and will embrace the whole country. The report will give the name of company, date of incorporation and charter, authorized capital, par value of shares, directors and officers, head office, Canadian office, number of men employed, wages, transportation facilities, market and prices.

The following additional information regarding the mining industry will also be given : Mining land owned and controlled, class and character of ore mined, average quality of ore (analysis), method of mining, treatment of ore (if any), cost of mining, total cost per ton of ore raised.

For the metallurgical industry, the following information will be given: Location of plant, ore treated, quality of product, method of treatment, description of machinery and apparatus used, source of supply of raw material, composition of raw material, and cost of production.

It is proposed to report only upon producing mines, mines under development, and established metallurgical plants. The present rapid progress in the development of these industries and the changing conditions regarding such factors as labor, market and prices will necessitate supplementary annual publications to bring the information of the original report up to date until the changes and new material call for the issuance of a complete new report.

Mr. Just Discusses Canada.

The industrial progress of Canada was discussed by Mr. C. F. Just, of the High Commissioner's office in London, before an audience in the capital of the Empire recently. That Canada is a subject of perennial interest to the people of England is shown by the fact that such lectures arouse general interest. Mr. Just sketched the growth of the country since 1878. Canada had, he said, built up a complete industrial system in that time. The capital invested in her manufacturing plants had increased in twenty years from $150,000,000 to $500,000,000. The last five years since the decennial census have shown a big advance on this again. Canada's 15,000 manufacturing establishments gave direct employment to half a million people.

The lecturer dwelt on the wide range of the industries of the country. She was equipped with all the basic industries, and there was scarcely an article of common use which she did not make well and cheaply. The iron and steel industry was represented by sixteen blast furnaces and shops, in which the most advanced work of engineering was performed. The textile industry was represented by 600,000 spindles and 16,000 power looms. Boots and shoes, pulp and paper, canned goods, all were produced in growing quantities.

Mr. Just also analyzed the trade of Canada, and pointed out the sources of her imports. No doubt the address will be of advantage in encouraging British merchants to consider more closely the possibilities for mutual trade.

Foreign Exhibitions.

Circular announcements have been received of the following exhibitions to be held in the near future by foreign countries anxious to secure a representation of Canadian manufactured goods.

1. International Exposition, Madrid, September to November, 1907. Displays of Hygiene, Arts, Trades and Manufactures are invited, and valuable prizes offered. The Exposition is under the patronage of the Spanish Government. The office of the Commissioner for the Foreign Section is 15 Rue Hydraulique, Brussels, Belgium. Further details on application to J. Enoch Thompson, Spanish Consul, Toronto.

2. World's Pure Food Show, the Coliseum, Chicago, November 19 to 25, 1907. Awards in 75 classes, grouped under the following heads : Animal products, preserved meats, canned meats and meat products, milk and milk products, honey, vegetable products, preserved fruits, pickles, flavoring extracts, sugars, edible oils, starch, flour, vinegars, whiskey and liquors, baking powders. Details on application to Thos. T. Hoyne, Managing Director, 1006 Monadnock Building, Chicago.

3. Franco-British Exhibition of Science, Arts and Industries, Shepherd's Bush, London, May to November, 1908. Under the distinguished patronage of the Governments of Great Britain and France. Elaborate plans are under way to make this exhibition one of outstanding importance. Full information on application to Imre Kiralfy, Hon. Sec., 56 Victoria Street, London, S.W.

4. Shanghai International Exhibition, to be held in Shanghai, China, towards the close of 1908. Endorsed and supported by the Shanghai General Chamber of Commerce, and the British, American, German, and Japanese Associations. Prospectuses are not yet to hand, but are expected shortly.

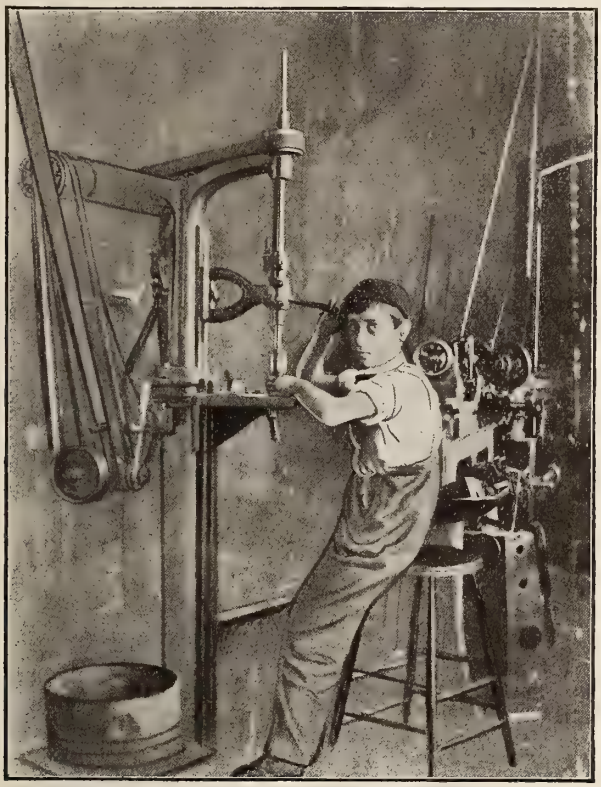
A Relic of Antiquity.

We might fairly have supposed that we were past the stage where labor-saving machinery would be opposed by workmen. Yet at the present time forty thousand miners in the Pittsburg district are threatening to strike because a new machine has been introduced. Mr. Goldwin Smith recalls that when the power-loom was introduced into England it was broken, and its inventors were mobbed by the hand-loom workers. Old men can still remember the burning of English barns by the farm laborers, who had risen against the introduction of threshing machines. It is needless to say that these poor people were fighting against destiny and the ultimate interest of their own callings. Their success would have driven trade away to fields where the use of machinery was free. But we must remember that every great industrial change, whether it is from the hand-loom to the power-loom, from the flail to the threshing machine, from the ordinary to the departmental store, or from the hack to the automobile, however beneficial in itself, does involve hardship to those who are dependent on the calling, especially if they are advanced in years ; and that consideration, where it is possible, is due. It may be that presently the community may take up cases of this kind, though at present the impracticable is so mixed up with the practicable, and all industrial questions are so prejudiced by class conspiracy and passion, that anything of the kind can hardly be done.

Practical Work in Training Workmen

High School Lads in the Factory.

IT is more than refreshing, it is instructive, to turn aside from the endless discussions, and the unceasing agitation promoted by the Association and other interested parties during the past years to ensure some provision for industrial education in our school system, and hear what one public-spirited manufacturer has done with the limited facilities at his disposal, to teach our youth a trade. Like charity good citizenship begins at home, and in the well conducted factory of the "Standard Bearings, Limited," Niagara Falls, Ontario, Mr. J. Dove-Smith has just inaugurated a movement which will be watched with interest by all those who realize the requirements of Canada in technical education. To Ontario's baby-city there belongs the credit of having been the birthplace of the most practical measure yet heard of in this country for equipping our boys for life in the factory.



High School Boy at Work in Factory.

Some four months ago, just after the Association had sent a deputation to Ottawa with a view of prevailing upon the Government to appoint a commission to investigate the requirements of the country in technical education, Mr. Dove-Smith, of the "Standard Bearings, Limited," Niagara Falls, called at the office to explain a proposal he had made to the Niagara Falls Board of Education, which he hoped would be productive of much good in the way of technical education. In brief, Mr. Dove-Smith proposed to the authorities that boys from the upper classes of the high school should be allowed to spend the whole of certain afternoons in his workshops, acquiring a general knowledge of machinery and such technical training as they could pick up. The time spent in the factory should count as a regular class, and the boys should be marked just as they would be in any ordinary subject in the school curriculum. The class in the factory was to be purely optional with the boys, so as to ensure, as far as possible, that those taking it would be interested in the work, and, preferably, looking forward to becoming skilled mechanics, or following the engineering profession. Naturally the proposal struck the members of the Board as unique, and there was doubt expressed as to its practicability. But Mr. Smith conducted the members over his establishment, explained how he proposed to instruct the boys, and convinced the Board that it would do no harm to give the scheme a trial at any rate. Led by Lieutenant-Colonel Cruikshank, Chairman, and the Principal of the High School, the Board became enthusiastic over this decidedly novel experiment and the principal began to arrange classes in the factory with Mr. Smith.

How the Scheme Works.

This was fourteen weeks ago. Since then six sets of three boys each have been spending five afternoons and Saturday mornings in turn in the work shops, some in the drafting room, some just watching all that goes on, and still others actually operating machines and producing saleable articles. The boys are eager to learn and very conscientious. They have apparently a serious object in view, and realize that the class in the factory is just as important as any in the school itself. They appreciate the privilege they are enjoying in being permitted to acquire a practical knowledge of mechanics in a factory, and know that diligence and good discipline are necessary or the privilege will be cancelled. Good order and industry have, therefore, characterized the efforts of the boys so far, and that the boys value their privilege highly, is borne out by the fact that not a single boy out of the first eighteen electing to take the "factory class," as it is called, has yet withdrawn or been sent away. The lads vary from fourteen to eighteen years in age, and in many cases are looking forward to an engineering course. Others intend to become mechanics at once. All are interested in their work, and there is no doubt in Mr. Smith's mind that the community will benefit from an industrial standpoint by having the boys acquire an interest in machinery, and learning the real dignity of laboring with their hands.

Results Satisfactory.

"I am perfectly satisfied with the experiment," said Mr. Smith last week. "In fact it has succeeded far beyond my expectations. Instead of causing loss of time and waste of material, as I feared before embarking in the experiment, I have actually gained, for some of the boys have turned out bearings equal to those made by my machinists. Several are operating drilling machines, and so well satisfied am I, that I am apprenticing six to work all summer for me on machines. They volunteered their services, and I am going to pay them half the usual apprentice wages. The only trouble or expense necessary on our part was a little of the time of my foreman and myself in showing the boys around at first and explaining the working and uses of the machines and their products. This was only necessary on the first few days, for the boys soon learnt. The School Board are also well satisfied, and take pride in the fact that this experiment was first tried in Niagara Falls. The principal, too, is pleased with the work of the boys. The class counts as part of the Physics Class. and I mark the boys percentage in the regular way. Not one has gone below forty-five per cent. so far."

The Preparation and Printing of the Catalogue

John M. Imrie (The Imrie Printing Company, Limited, Toronto).

IN view of the recent very rapid increase in the number of manufacturers who use the catalogue as a selling medium, it is quite probable that some of INDUSTRIAL CANADA'S readers have in contemplation at the present moment the issuing of their first catalogue. To such a person an article on the preparation and printing of the catalogue can hardly fail to be of interest—perhaps even to some who, while they have passed the first experimental stages are not just as familiar with the requirements of the successful catalogue as they might wish to be.

Without presuming in the least to pose as an authority on catalogue printing, permit me to answer, in a simple, practical manner, a few of the questions which are continually being asked the catalogue printer by his customers.

The Size of the Catalogue.

"What would be the best size for me to make my catalogue ?"

Open your catalogue cabinet, sort over its contents according to their size, and you will find that the bulk of them will be included in six or seven different sizes. The reason for this is that the "stock" size of paper upon which catalogues are printed permit of them being made one of six or seven different sizes. The few about which there is no uniformity of size have doubtless a large number of pages in them, or are from large editions, where the quantity of paper used would be such as to warrant a special size of paper being made to order for it.

The most common of the stock sizes are 6 x 9 in., 7 x 10½ in., 7½ x 10 in., 9 x 12 in., 10 x 15 in., 10½ x 14 in., any one of which can be made without waste of paper.

Attention should also be given to the number of pages in the catalogue. As a rule, catalogues are printed sixteen pages at a time. It is, therefore, advisable, where possible, to have the total number of pages in the catalogue a multiple of sixteen. An odd twelve pages over the even number of sixteens would cost almost as much to print as an additional sixteen pages.

The Quality of the Paper.

"What kind of paper should I use ?"

Great care should be taken in the selection of the paper for the catalogue in order that it may be suitable for the engravings used. Unless you have had considerable experience in preparing catalogues you should be guided very largely in this matter by the advice of your printer.

Where half-tone cuts are employed in the illustration of the catalogue it is almost essential that coated paper be used. If you desire a particularly high-class catalogue you may have a double coated or enamelled paper. Should your cuts be zinc etchings, and a cheaper class of catalogue will answer the purpose, the ordinary calendered or super-calendered paper will do. All papers are made in several different "weights" or thicknesses.

Not infrequently two grades of paper are used in a catalogue. The half-tone cuts of the articles catalogued are often printed on coated or enamelled paper, with an alternate sheet of half size, rough finished deckle edge paper, on either side of which is printed the descriptive matter for the article illustrated on the coated paper opposite it. This lends somewhat of a variety to the catalogue and gives a very pleasing effect, although its use is limited to catalogues where but one or two illustrations are used on a page.

In large catalogues it is a good plan to use an insert or two. If printed on a better quality of paper, and with a two or three color half-tone instead of a one color cut, it relieves the sameness of the book, besides giving you a good opportunity for emphasizing a leading line.

Do not be afraid to spend a little money on a good paper. It enables the printer to bring out the cuts and type better, and gives to the whole catalogue a suggestion of quality and prestige which increases considerably its value as a selling medium.

The Cover of the Catalogue.

Pay particular attention to the cover of your catalogue.

There is a great deal in "first impressions." Many a catalogue has been summarily consigned to the waste basket because of an unattractive, commonplace cover ; while its competitor has been examined and preserved owing to the attention and interest of the recipient being aroused because the cover (the first thing which he sees) was adorned with a striking effective design.

Money spent on a two, three or four color design is well invested. The style of the design will, of course, vary according to the size and nature of your catalogue; for, to my mind, the cover design should, if possible, be suggestive of the articles catalogued.

The "Write-Up" of the Catalogue.

In preparing the copy for your catalogue do not make the mistake of endeavoring to fill with descriptive matter every inch of paper not taken up with the cuts.

The value of your illustrations will be doubled if you allow considerable white space around them. It is not necessary to tell in your catalogue *all* the points of your goods—leave a few of them for your salesman to point out, or for the purchaser to discover afterwards. There is something decidedly uninviting about a catalogue where every available space is covered with reading matter.

Write your copy on one side of the paper only—*and write it well.*

Where cuts are used, paste a print of the cut on the sheet containing its description ; or else write a number on the bottom or side of the cut and a corresponding one on the position which it is to occpy. Remember that the printer is not as familiar with your different lines as you are yourself, and where he has no number or print of the cut to guide him it is sometimes a rather difficult matter to select a certain cut out of, perhaps, ten or fifteen others very similar in size and style to it.

It is often a good plan to select your printer *before* you write up your matter. Get him to call on you—get him interested. Tell him what you are going to issue, and see what suggestions he has to offer. If he is a man who has a large catalogue trade he is almost certain to have, from his very connection with that class of work, some suggestion to make which may be of great benefit to you in making your catalogue an effective one.

The tendency to a higher standard which has marked almost every line of manufacture has been very prominent in the printing of the catalogue. The style of catalogue which filled the requirements of ten years ago will not do to-day, because with the enormous increase in the number of catalogues issued comes the necessity of having a certain distinctive quality about your own issue if it is to be preserved by the recipient and fulfil to the utmost its duty as a selling medium.

Transportation Problems

NEW UNIFORM BILL OF LADING.

ON March 6th, 1907, the Board of Railway Commissioners sent out a circular, enclosing a draft form embodying the general terms and conditions of carriage for the new bill of lading, as submitted by the railways. In order to save time the Board did not think that it should wait for further conferences between the companies and the Board, but that as great publicity as possible should be given to the consideration of the conditions, in order that all parties interested might make any representations they desired. Any persons desiring to make representations in respect to the draft submitted were requested to file the same with the Secretary of the Board on or before the first day of May, 1907.

As the Canadian Manufacturers' Association had placed its views on record by resolution, passed in convention at Winnipeg, September 18th, 1906, and as the draft submitted by the railways proved, in many instances, to be more objectionable than the bill of lading now in use, it was unanimously decided to follow the lines laid down in that resolution. The following resolution was accordingly adopted :

Resolved,—That we favor the adoption by all shippers of a simple form of bill of lading without any conditions, such as are embodied in the bills of lading in use by the various railways throughout the country ; that such form of bill of lading be an acknowledgment that the carrier has received the goods for transportation ; and that the Board of Railway Commissioners for Canada be requested to issue a ruling that the present forms, as well as the draft of general terms and conditions of carriage, as submitted by the railways in accordance with an order made by the Board, under date of October 17th, 1904, and which was sent out by the Board on March 6th, 1907, to all parties interested, which in any way conflicts with both the Common and Statute Law, are illegal, and their use and acceptance should not be forced upon the public ; and that a date be fixed when such order will take effect.

This resolution was duly filed with the Board within the time prescribed, and preparations made to appear before the Commission in support of this position, whenever a hearing was fixed, provided it was found necessary to have one. We are now advised that at the request of the Winnipeg Jobbers' Association, the Montreal Board of Trade, the Montreal Corn Exchange, and the Bankers' Association, the Board has enlarged the consideration of the same until after the first of August next.

It is to be regretted that it has been found necessary to ask for an extension of time to consider these conditions. The Board did not ask that they should be considered as coming from that body. They merely asked that objections, if any, be filed to what was submitted by the railways, in order that they might be dealt with when the Board finally decided to take action.

The Association took the initiative in pressing for a clean bill of lading, and have been supported by Boards of Trade and kindred associations generally throughout the country. It is, therefore, to be hoped that all interested parties will have filed their replies in order that the Board may take up this important matter, as soon as a date can be fixed after August 1st prox.

Good progress is being made in the United States with the uniform bill of lading. After a long agitation a binding agreement between shippers and the railways has been agreed upon. This is to be submitted for the ratification of the railways and commercial interests of the country early in July. The effect of the ratification will be to make the new bill of lading part of the Interstate Commerce law. The shippers then will have the thing for which they have fought for the last decade, a railway receipt binding on the carriers. The new bill will hold the initial road and its connections responsible for a shipment from the time it is delivered to the company until it is delivered to the consignee at its destination.

FREIGHT CLASSIFICATION AND RATES.

Now that freight rates are practically uniform on all of the railways there is little real competition from this point. There is, however, considerable in point of facilities, prompt handling, time in transit, etc., which often enables certain lines to secure the bulk of the traffic at even rates. As rates are looked upon as practically a fixture, and no line will take action without the concurrence of the others, the feeling may exist that we are perfectly safe from any change. Such is not the case. The classification fixes the rate to be charged. A slight change in same, although apparently trifling on the surface, may result in an advance in rate or the imposition of a condition of carriage, which at the end of the year might in the aggregate amount to much. The freight traffic of the railways is carried under two general classes of schedules, known as class tariffs and commodity tariffs. The latter have reference to schedules applicable to such articles as grain, lumber, coal, live stock, etc., transported between sections of the country where these articles have attained a commercial and shipping importance, which has made necessary specific rules for their transportation differing from those covering classified traffic, as well as a somewhat lower scale of rates than is applied to the latter. Class tariffs are arranged to show the rates of the respective classes contained in the freight classifications.

In the latter are found the great majority of articles carried by the railways, classified in accordance with the various elements that properly enter into the determination of freight charges.

Under these are also found the commodities above mentioned, and although exceptionally treated in certain cases as to rates, they are amenable to some rule of the classification.

The rate-making foundation for all commodities is seen to lie largely in the freight classification.

The classifications as now constructed have for their foundation the following elements :

The competitive element or the rates made necessary by competition.

The volume of business.

The value of the article.

The bulk and weight.

The degree of risk attending transportation.

The facilities required for particular or special shipments.

The conditions under which the railways can afford to transport traffic have a large influence in determining the classification.

These are the general rules under which classifications are constructed, and while, to a large extent, they were formerly in the hands of the railways to determine, the situation has changed, and as a result changes in classification are now in a great measure a series of compromises, the participants in which are not alone the railroads, but also the shippers and representatives of business interests throughout the country, the latter more so since the Railway Commission has come into existence. As there is practically only one classi-

fication in use in Canada at present, concessions are not now so readily granted, and these can only be brought about by strong pressure.

The Canadian Manufacturers' Association watch closely this important matter, and are constantly making representations towards improvements in the classification. When changes are proposed all interested members are promptly notified, attention drawn to same, and in what manner the change will affect them. In this way not only are the interests of the members being watched, but the shipping public generally benefit thereby. It is true that the Railway Act provides that notice of changes which involve advances must be published in the *Canada Gazette*, but it is safe to say that a very small percentage of the shipping public subscribe to this publication, and, therefore, are absolutely without knowledge of any contemplated change, and only learn of it when they are confronted with a new classification legally approved of by the Board of Railway Commissioners.

NO ADVANCE IN RATES PERMITTED.

The Board of Railway Commissioners have recently issued an order extending the time for the approval of the tariffs and classification of the express companies until November 1st, 1907. The order sets forth "that pending the approval of the said tariffs of tolls by the Board, the applicants (other than the Canadian Northern Express Company) shall not charge any tolls higher than those which were charged by such applicants, respectively, on the 1st day of March, A.D. 1907." It will be observed that the express companies will not be permitted, in the interim between the time the tariffs were originally filed for aproval and the time fixed that such will be finally approved, to make any change in their rates in any manner whatever, that will bring about an advance.

The representations made to the commission have no doubt had some effect in putting a stop to the alleged advances in rates which, it is claimed, are being made.

RELATION OF THE RAILWAYS TO THE PUBLIC.

Martin A. Knapp, Chairman of the Interstate Commerce Commission, United States, said in the course of an interview on June 16th :

"It is very plain to me that within recent years there has been a vast improvement in the methods of railway management as respects the obligations of the railways to the public. If the practices which were characteristic and almost universal less than two years ago are compared with the practices which now generally obtain, it will be seen that an immense advance has been made toward correct and impartial dealing. Indeed, there has been a marked change in the average conception of the railway in its public relations.

"The clearer and more correct point of view powerfully aids the regulative laws, with the general result that to-day, for the first time in the history of American railways, secret preferences and advantages have practically disappeared. It is because of this more elevated and wholesome conception entertained by the average mind, this augmented and intense sensitiveness respecting matters which were regarded with indifference, that I believe the standard of business morality in every sphere of activity has been greatly elevated, especially so within the last few years.

"Nothing seems to me more important at the present time—nothing has so much to do with our national prosperity in the immediate future—as to provide with the least possible delay a very great increase in our transportation facilities. The profitable output of the farm, the forest and the factory is measured by the ability to move the product promptly and cheaply from producer to consumer. Upon an increase of profitable production depends our continued advance in material wealth, and that increased production must in turn depend upon enlarged facilities for their distribution."

A COMMISSION OF INQUIRY.

Announcement was made on June 26th of the appointment by the Quebec Government of a special Commission to inquire into the different Workmen's Compensation laws in force in different parts of the world, and to suggest improvements in Quebec laws bearing on this subject. The Commission consists of Arthur Globensky, K.C., Chairman ; Chas. B. Gordon, Vice-President and Managing Director of the Dominion Textile Co., Limited, and Felix Marois, of Quebec. The Secretary is Mr. Leon Garneau, advocate, Montreal.

CANADIAN MANUFACTURERS' CRITICIZED.

THAT the majority of Canadian manufacturers are short-sighted optimists is the burden of complaint of those who are endeavoring to buy goods for export in Canada. Charges of this nature have been very frequent in the past six months, and the opinions of Australian, West Indian, South African and British merchants and agents attempting to purchase in Canada are unanimous against the folly of Canadian manufacturers neglecting export business at the present time, merely because the unexampled prosperity Canada is enjoying gives them all they can do to fill home orders. This is an old story, but it really looks as though the Canadian manufacturer "should try to see beyond the end of his nose," as one correspondent puts it. The opinion of those suffering from this so-called short-sighted policy of Canadian firms is well expressed in the following extract taken from a letter recently received from a well-known West Indian resident agent, who has been attempting to form export connections with Canada in the boot and shoe trade for the past few months : "Canada is opening up so quickly that the manufacturers there find they have all they can do to keep abreast of home requirements. This is very satisfactory from one point of view, but rather rough on those situated like myself who are trying to work up trade between the Dominion and British West Indies. A few moments ago I was talking to one of our leading merchants, and he said he would give Canada the preference on his orders, but it was impossible for him to wait indefinitely to have them filled, and that with his last paper order five months elapsed between the date of order and receipt of goods. Fortunately some of your manufacturers are in earnest about export trade, and do their utmost to meet it. Others seem to consider it simply a side-show, to be used when they are not filled up with home orders. This idea is suicidal and does great injury to legitimate trade."

We agree with our correspondent that some day the manufacturers of Canada will be sorry that they regarded export business as a "side-show," to be taken in when the other show was not running well. It takes a long time, great care and no small expense to develop good export connections, and it behooves the Canadian manufacturer to begin early if he ever hopes to get into any of the great outside markets. In the last six months over twenty firms, at one time exporters, have notified the Association that they no longer care to receive export inquiries, as they are giving all their attention to home orders. This may be all right for the present, but what about the future ?

Correspondence

UNFAIR WEIGHING.

To the Editor INDUSTRIAL CANADA.

In the June issue of INDUSTRIAL CANADA, on page 859, I observe an article that refers to the weighing of car load freight by railways. It seems to me that your criticism of the methods employed by railways in weighing shipments on track scales, for the purpose of assessing freight tolls, is timely. The matter is one to which the Railway Commission would do well to devote the time of some of its inspectors. There is, no doubt, a great deal of money collected in the way of excessive freight tolls by reason of erroneous weights, which are shown through the careless methods used by the attendants when weighing freight. The very fact that weights are taken while cars are moving over the scales coupled together, should convince any reasonable mind that the railway weighers are not in a position to positively prove their weights to be correct, yet you will find the railway officials invariably stand by their track scale weights, and demand payment of the tolls regardless of any proof which the manufacturer or shipper may be able to produce, tending to show the track scale figures to be wrong.

In this connection the writer of the article in question has omitted a very interesting point, namely, when the railway track scales show the weight of the carload shipment to be below that given by the shipper on his shipping bill, the railway never marks down the weight, but allows the original weight as declared by the shipper to stand. On the other hand, if he should declare a weight which is below that given by the track scale weighers, invariably the railway agent at the point of destination marks up his freight bill on the track scale weight—yet the railway's scales must be right (?).

This matter appears to have received some attention at the hands of the Railway Commission in one of the Southern States, where the weighers are sworn in under the commission, and are placed in a position to deal fairly between the railway and the shipper. Under our system, however, the weigher who, as you have aptly stated, is sometimes the station agent or the telegraph operator, or the switchman—depending upon the time of day and the location of the track scale—is a servant of the Railway Company and must ally himself upon their side of any dispute in order to protect his position.

The use of the track scale for ascertaining weights of carloads for the purpose of assessing freight tolls is now so universal that it seems, in the interest of the public, our Railway Commission would be well employed in devising a means whereby not only would the cars be properly placed upon the scales and left at a stand-still and detached during the process of weighing, but also the officials would be removed from their direct responsibility to the railways and thus enabled to act fairly as between the railway and the shipper.

June 20th, 1907. SUBSCRIBER.

HEWERS OF WOOD.

R. W. Perks, a member of the British Parliament, a millionaire railroad builder and contractor, and a pronounced free trader in so far as Great Britain is concerned, is in Canada. Rumor says he is after the contract for the construction of the Georgian Bay canal. Contractor Perks could hardly have attained such success as has been his without being clear-headed to a degree. He told an Eastern newspaperman the other day that he would always fight for free trade—*i.e.*, free imports—in England.

"But were I a Canadian, I would be a protectionist. It is essential to foster local industries. I would use all my influence, were I a member of the Canadian Parliament, to prevent the export of raw materials, such as pulp-wood, taken to the United States to be made into paper, and then reimported into Canada."

Almost simultaneously with Mr. Perks's remarks on the pulp-wood issue, the British Government's annual report on the importation of paper arrived in this country. It furnishes the finest possible proof of the economically stupid action of Canada in giving away its spruce and other pulp-woods to be turned into paper in the mills of the United States. The British consumers of paper in 1906 imported nearly twenty-nine million dollars worth, an increase of two and a quarter millions over 1905. This was classified as paper on reels and not on reels. Of the former—"news print" paper—82 per cent. came from Sweden, Norway and the United States. Germany, and even the treeless Holland, made a fairly good showing, though far behind. Canada, the greatest pulp-wood country in the world, is not even mentioned. In paper not on reels the same countries again led. They supplied 89 per cent., and again Canada's name is not to be found in the tables.

Here is the lesson in a nutshell: The West has plenty of spruce; New Ontario already exports from its illimitable resources. We Canadians have the greatest supply; Great Britain is the greatest consumer. Yet we have only one insignificant share in about ten or fifteen per cent. of Britain's consumption. On the other hand, the United States, which is an exporter of paper only because Canada supplies the material, is among the leading exporters. Canada is satisfied—or her Government only allows her—to be a hewer of pulp-wood at $6 or $7 the cord. The United States saves its forests—what is left of them—and sells our pulp-wood in the form of paper at $30 per cord for good British gold.

Does it not seem as if we were, as the man in the street puts it, "dead easy" to let this go on? Ontario has, it is true, prohibited the export of pulp-wood from Crown lands, but this is but a drop in the bucket. What Mr. Fielding should do is to clap on an export duty that would apply to all Canada. Quebec, under the Parent and Gouin Governments, has been the most flagrant offender, and New Brunswick is a good—or bad—second in handing over a national asset. The Americans must come to us for the raw material. If they were compelled to manufacture or contribute to the treasury, they would dot the Canadian hinterland with paper mills. Our own capitalists would become interested, and Canadian consumers of printing paper would never more, as they had to do a few years ago, have to fight against a combine. Even now, New York prices regulate Canadian prices. —*Winnipeg Telegram.*

Mayor Frank Parry, of Michigan, Soo; George Kemp, F. C. Smith, and other capitalists, will erect a big concentrating plant on the Ontario side of the river, just west of the plants of the Lake Superior corporation. The company will build a railway five miles long from Algoma Central to Superior mine, and rush work on the property, said to be worth $10,000,000.

Representatives of Haines, Vongal & Co., of New York and Danbury, Conn., have been looking at the advantages of a number of cities as sites for a Canadian branch factory. This company are large hat manufacturers, having a considerable business already in Canada. They propose building a factory at a cost of $30,000, employing at the outset one hundred hands.

First Aid to the Injured in a Canadian Factory

How the Montreal Rolling Mills Company Instructs its Workmen, that they may Render Ready Relief in Time of Accident.

ONE of many new schemes to benefit the factory worker is that known as the teaching of first aid to the injured, a system recently introduced by the Montreal Rolling Mills Co., and which is working very satisfactorily. Certain industries are more liable to danger than others, and in a factory as large as that of the Montreal Rolling Mills accidents are bound to occur, no matter how many precautions are taken to insure the workman's safety. The attention of the management of this company was first drawn to the importance of first aid training by an accident last year, when a workman nearly bled to death because no one around knew what to do for him. When an accident occurs time must elapse before the ambulance arrives, and it is often essential that the victim be given immediate care if his life is to be saved. Even in less serious cases much can be done for the comfort of the injured man if his fellow workmen understand what is required.

At the company's request, the first aid system was introduced last year into the Montreal Rolling Mills by the St. John Ambulance Association, an organization of world-wide fame, which has its headquarters in England. Dr. Walter A. Wilkins undertook the work and three classes of thirty men each were organized. The course comprised five lectures, on Monday nights, from 8 to 9.30 p.m. The men were trained what to do in cases of cuts, sprains, poisoning through acids, hemorrhages, fractures, burns or scalds, etc. They learned about the human body, how to apply bandages, to stop bleeding, artificial respiration, how to lift and carry the sick or injured, and to prepare for the arrival of the surgeon. The last half hour of each lecture was devoted to practical work, such as the application of bandages and splints, lifting and carrying wounded on stretchers.

At the end of the course an examination was held under the direction of Dr. Ridley Mackenzie, and those who passed were given certificates from the headquarters of the St. John Ambulance Association in England. Candidates for examination were obliged to attend four out of the five lectures. It was particularly gratifying to the management of the company to find that out of the ninety men in the first three classes, sixty-seven were succeesful in getting their certificates.

In order that the right men may be found when an accident occurs, the names of all those who have taken the courses and passed successfully are posted in the different departments. Thus no difficulty occurs in getting someone at once to take charge of the case, and with the assistance of others, he renders aid to the sufferer until the arrival of the physician and the ambulance. In each portion of the factory is a cabinet containing splints, bandages, medicines and other emergency requirements.

The first aid system has been given a great many trials during the past year, and has always proved successful. In the wire mill there were several accidents which might have led to serious results but for the members of the first aid class. In one case a man walking through the cleaning department ran into another employe who was carrying a pail of sulphuric acid; one of the men was badly burned on both legs, but the first aid men got hold of him at once, tore his clothes off, bandaged him up and sent him to a doctor. The doctor complimented the men upon their good work, and said that if they had not rendered speedy assistance the victim would have been laid up for a few weeks, whereas he only lost one day's work.

In the rolling mill department a man incurred a compound fracture of the leg, the first aid class put him in a comfortable position, removed some of his clothing, cleansed the dirt from the wound and applied splints in a proper manner. Accordingly when the surgeon arrived with the ambulance half an hour later, he simply had to put the man on the stretcher and take him away to the hospital. Without the first aid system that man would have been left in agony until the arrival of the ambulance.

The management of the first aid system in this factory rests in the hands of a committee of five of the superintendents. This committee picks out the men for the courses with a view to having them represent all the different parts of the establishment. The company pays the lecturer, the examiner and for all the necessary supplies. There has not been the slightest difficulty in obtaining recruits for the classes.

The men are enthusiastic over the idea, because they see what a great benefit it is to them, and the attendance at lectures has been remarkably good.

The possibility of the men who have taken the courses getting out of practice and forgetting the instructions they have received has been overcome in this way. A demonstration for graduates is held once a month, and every three months they are given a special lecture by Dr. Wilkins, in order to brush up their knowledge and to answer any questions that may come up.

The company in undertaking this system in their factory has found that it is highly appreciated by the workmen. The risk of accidents or illness is always present, and the fact that the employers are doing their best to diminish suffering by this means, only increases the confidence of the men and marks the shop as a favorable one in which to work.

The expense to the company has been considerable, but they feel amply rewarded by the results already obtained.

THE RELATIVE ECONOMY OF STEAM AND GAS POWER.

In a paper presented before the Ohio Society of Mechanical Engineers, J. R. Bibbins compares steam and gas engines with regard to fuel economy. He states that with coal of 13,500 B.t.u. per pound, nearly 35 per cent. of the heat value is lost in the boiler plant; about 57 per cent. more in the engine plant, and that only 8.3 per cent. is realized as net work in the engine. In a producer gas engine plant the producer loses 25 per cent. of the heat in the coal (assumed the same per pound as in the steam plant); the engine wastes an additional 58 per cent. nearly, leaving a net of 17¼ per cent. represented by work, this being more than twice the net result obtained from the steam engine. Part of the gain is credited to the better efficiency of the producer, as compared with the steam boiler, and the balance to the superior heat efficiency of the gas engine. It will be noted that the gas engine dissipated more of the original heat than did the steam engine (58 per cent. in place of 57); but, as a matter of fact, it dissipated a smaller percentage of what it originally received from the generating plant (77 per cent. in place of 87.3 per cent. for the steam engine); and, when compared with the net work accomplished, it is far superior, having given one unit of work for each 3.35 units delivered to it, as compared with one unit for each 6.88 units delivered to the steam engine.

Fire Insurance Results in Canada

What the Reports to the Government Reveal,

THE annual report of the Superintendent of Insurance has been published and distributed since our last issue, and it furnishes very interesting reading for those who have the inclination to dig into its depths. Few, however, have the time to do so, yet nearly every insured, certainly every manufacturer, would like to know whether the companies are making or losing money, and, *per se*, whether rates are too high or too low.

The insurance journals do not appear very anxious to give publicity to the actual results of last year, presumably preferring to "let well enough alone"; probably also they are actuated by the further reason that the less that is said about it the less will be the criticism from the insured, and "where ignorance is bliss 'tis folly to be wise."

For the year ending 31st December last the fire insurance companies licensed by the Dominion Government issued policies on risks in Canada to the extent of approximately twelve hundred millions of dollars, exceeding the amount of the previous year by about six per cent., and on this large volume the trading results were as follows :

Premiums Received		$14,711,056
Losses	(44.58 %)	$6,558,050
Expenses	(28.82 %)	4,239,504
		10,797,554
Actual Profit		$3,913,502 = 26.60 %

The *Chronicle* of Montreal, the leading insurance journal of the country, in its issue of June 14th, very naively remarks, "The year under review may be considered as satisfactory to the companies." We scarcely think any of the members of the Canadian Manufacturers' Association will feel inclined to dispute the conclusion thus expressed, but as there is always two sides to a question the average insurer may be permitted to question the satisfaction from his point of view. It would certainly seem that a profit of 26.60%, or nearly 80% of the total insurance capital employed in the Dominion, *should* be satisfactory to the companies, and it is a matter of gratification that the fire waste of the country, as represented by the losses paid by the companies, was for the second year in succession so moderate in amount. But when it is considered that of every dollar paid by the insurer only 44½ cents was employed for the purpose for which it was primarily contributed, the feeling of elation is likely to be confined to one side of the contracting parties.

The year 1906 was not, however, as favorable as its predecessor, when the actual profit derived was $4,243,282, or 29.70%, as follows :

Premiums Received		$14,285,669
Losses	(42.00 %)	$6,000,516
Expenses	(28.30 %)	4,041,871
		10,042,387
		$4,243,282 = 29.70 %

In the year 1904 there occurred the Toronto conflagration, the most disastrous in the history of the Dominion, and in that year the insurance companies sustained a severe loss, which caused them to largely increase the rates on all classes of risks throughout the Dominion. According to the Government Blue Book the companies paid in the Toronto conflagration losses to the amount of $7,250,323, and in that year the actual loss on the year's operations was $4,643,591.

The following summary of the results of the last three years presents the matter a little more clearly :

Year.	*Prems.*	*Losses.*	*Ratio.*	*Expen's.*	*Ratio.*	*Loss.*	*Ratio.*	*Profit.*	*Ratio.*
1904.	$13,169,879	$14,099.534	107.06	$3,713,936	28.20	$4,643,591	35.26.		
1905.	14,285,669	6,000,516	42.00	4,041,871	28.30			$4,243,282	29.70
1906.	14,711,056	6,558,050	44.58	4,239,504	28.82			3,913,502	26.60
Total	$42,166,604	$26 658,100	63.24	$11,995,311	28.44			$8,156,784	
								4,643,591	
Actual Profit, 3 years								$3,513,193 = 8.32%	

So that in spite of the occurrence of the worst disaster in the country's history, the companies actually made a profit of 8⅓% on the turnover in each of the three years. At the same time approximately seven and one-half millions of dollars (included in the expenses above stated) went to agents and brokers by way of commission, *i.e.*, about 17½% of the entire premiums. It is worth noting that in the three years the amounts paid to agents and for losses in the Toronto conflagration are about equal.

Viewed from another point, the total capital of the fire insurance interests applicable to the Canadian field is slightly in excess of five millions of dollars, so that the actual net profit of $3,513,193, for the three years, as above given, practically means a profit of 23½% per annum on the employed capital.

It is surely quite pertinent to ask the insurance companies how long they propose to maintain the increase of 20% on all manufacturers' risks imposed after and in consequence of the Toronto fire. There was no justification for its unreasonable imposition in the first place, still less can there be any excuse for its continuance after the results above quoted.

If these results are true, and we have taken them from the statements furnished by the companies themselves to the Dominion Government, why should not our manufacturers associate themselves together in an effort to provide some portion of their insurance at *actual cost?* This is the question that most naturally arises from a study of the figures above quoted, and one that the Insurance Committee of the Association is doing its best to satisfactorily answer.

SUGGESTIONS FOR POLICY HOLDERS.

One of the features of last week's convention of the National Association of Credit Men was the report of the committee appointed at the 1905 convention to inform itself of the adjustments made by the various insurance companies carrying policies in San Francisco and ascertain which of such companies had dealt justly and liberally with the people of that city in the adjustment of their losses.

The committee have kept in constant touch with insurance adjustments since the San Francisco fire, have made investigations on independent lines concerning the attitudes and claims of the various insurance companies, and have examined the reports made by the Chamber of Commerce of San Francisco, the Insurance Commissioner of California, the various insurance reporting bureaus and the insurance companies themselves. Special use was also made of the report compiled by Prof. A. W. Whitney, of the University of California, for the San Francisco Chamber of Commerce, and also of the Alfred M. Best Co.'s "Special Report Upon the San Francisco Losses and Settlements."

The report refers to the indignation and protest aroused by the difference between companies in the methods of adjustment, the disposition to adjust, and the results of adjustments, and to the resolutions adopted by associations of merchants in condemnation of the practices of some of the

companies. The resolution of the National Association of Credit Men was given the greatest publicity, and the committee held that while violent resistance was made to its demonstrations by a few insurance companies, the result was greatly beneficial to the people of San Francisco in obtaining better adjustments.

Honorable Companies Best Aid.

The report emphasized the fact that the people of San Francisco received their greatest aid in obtaining honest and liberal adjustments from honorable and fearless insurance companies, which refused to be parties to agreements for arbitrary deductions, and which paid their losses, amounting to millions of dollars, in a spirit of liberality and honesty.

The report says that consideration should be given to the fact that careful experts have estimated the earthquake damage in San Francisco as not exceeding 3 per cent. of the total damage, and, further, that in many cases the companies themselves caused great delay in making adjustments, and then demanded deductions which would have been proper only in the case of immediate payments.

The Roll of Honor.

The report includes the following list of companies, which, in the opinion of the committee, should be placed on the roll of honor :

Aetna Insurance Co., Hartford, Conn.; Alliance Insurance Co., Philadelphia ; Atlas Insurance Co., London ; California Insurance Co., San Francisco ; Citizens' Insurance Co., St. Louis ; Connecticut Fire Insurance Co., Hartford, Conn.; Continental Insurance Co., New York ; German Alliance Insurance Co., New York ; German-American Insurance Co., New York ; Hartford Fire Insurance Co., Hartford, Conn.; Home Insurance Co., New York ; Insurance Company of North America, Philadelphia ; Law Union and Crown Insurance Co., London ; Liverpool and London and Globe Insurance Co., Liverpool; London Assurance Corporation, London; Manchester Assurance Corporation, London; Michigan Fire and Marine Insurance Co., Detroit, Mich.; New Hampshire Fire Insurance Co., Manchester, N.H.; New York Underwriters' Agency, New York ; Niagara Fire Insurance Co., New York ; North British and Mercantile Insurance Co., London ; Northern Assurance Co., London ; Pelican Assurance Co., New York ; Phœnix Assurance Co., London ; Queen Insurance Company of America, New York ; Royal Insurance Co., Liverpool ; Scottish Union and National Insurance Co., Edinburgh, Scotland ; Springfield Fire and Marine Insurance Co., Springfield, Mass.; Sun Insurance Co., London ; Union Assurance Society, London ; Washington Fire Insurance Co., Seattle, Wash.

Maintained High Average.

The following companies, while not included in the roll of honor, maintained a high average of payments and settled their losses to the satisfaction of their policy-holders :

Agricultural Insurance Co., Watertown, N.Y.; American Central Insurance Co., St. Louis ; American Insurance Co., Newark, N.J.; Glens Falls Insurance Co., Glens Falls, N.Y.; Mercantile Fire and Marine Insurance Co., Boston ; New Zealand Insurance Co., Auckland, N.Z.; Pennsylvania Fire Insurance Co., Philadelphia ; Phœnix Insurance Co., Hartford, Conn.; Protector Underwriters, San Francisco, Cal.; Providence-Washington Insurance Co., Providence, R.I.; Security Insurance Co., New Haven, Conn.; St. Paul Fire and Marine Insurance Co., St. Paul, Minn.; State Fire Insurance Co., Limited, Liverpool, England ; Teutonia Insurance Co., New Orleans, La.

Merchants Should Study the Matter.

The committee emphasized the fact, as demonstrated by the San Francisco fire, that too little atttention is paid to insurance matters by the insured.

"It has been demonstrated," says the report, "that it is as important that a merchant know the conditions of his policy and the standing of the company in which he carries his insurance, as that he knows any other vital detail of his business. It has demonstrated that the wise merchant will no longer allow his insurance agent to place his policies wherever the agent sees fit, and without reference to the standing of the companies, their ability to pay, or the past record of their adjustments. It has demonstrated the importance of preserving uniformity in the conditions of policy contracts."—*The Dry Goods Economist.*

The moral, which is pointed in the last paragraph of the above article, is one which has been dwelt upon with all possible force by the Insurance Department of the Canadian Manufacturers' Association. Its work along the line of expert examination of policies has been of great material benefit. The policies must be right if satisfactory settlements are to be assured when loss occurs.

BOOKS FOR BUSINESS MEN.

Foreign Exchange.

A book of immense value to business men, who either buy from or sell to foreign nations, has been issued by H. K. Brooks, 78 Monroe Street, Chicago, under the title of "Brooks' Foreign Exchange Text-book." Mr. Brooks has succeeded, not only in tabulating the monetary systems of the world, but in presenting them in a lucid and concise form, so that they can be used in a moment by a busy business man. The theory and practice of international trade and foreign exchange is discussed in the first chapter. Then are given chapters on the financial systems of the nations of the world, with the relative value of various coins, and methods of expressing a value in terms of any system. Following this is a description of the commercial forms which are used in international trade, methods of transmitting money, letters of credit, etc. The subject is carried on still farther in an appendix to the volume. The whole work will be found of invaluable assistance to business men. It is a book of reference that every commercial library should contain.

"Catalogueisms" is the title of an attractive booklet recently issued by the Imrie Printing Co., Toronto. It is the first of what is to be a series of talks on catalogue making. The initial number is sure of being read. It is artistically designed and well printed. Besides giving some pointed facts about catalogues, which are now being produced, it contains an article showing how cuts and illustrations are made. This will be followed by other articles outlining the whole process.

The Robert Bell Engine and Thresher Co., Limited, have issued a very complete catalogue of their manufactures. They cover the field of farm implements and sawmill machinery very extensively. The illustrations are most effective. Every detail of construction is shown, with a description of the make and operation.

The annual report of the Board of Trade of busy Berlin has been printed, and provides some interesting and instructive reading. Berlin has certainly earned its appellation of busy. The whole town is a workshop. The report is an adequate discussion of the town's advantages and progress.

A catalogue has been received from the Thomas Organ and Piano Co., of Woodstock, Ont. It is an effective exposition of the quality of their organs. The booklet is illustrated throughout with cuts of different styles of instruments.

THE STATUS OF UNIONS ESTABLISHED

The case of the Metallic Roofing Company has settled the Liability of Members of a Union. Individually liable. Every member of an International body personally responsible.

IN August, 1902, the Sheet Metal Workers' Union endeavored to force the Metallic Roofing Company of Toronto into agreeing to maintain a closed shop, and to other very obnoxious conditions. The demands were all the more objectionable because the company had in its employ at that time a number of workmen who had been with it for some years, and who were unwilling to become members of the union. The union, in its effort to force the company to come to terms, sent out letters to the company's customers, setting forth that on and after a certain date the members of the union would refuse to handle material of the company's manufacture, even for those employers for whom they were working, and who had signed an agreement with them. The union instituted a boycott against the goods manufactured by the company, and by this and other means did whatever they could to injure the company's business. As it was evidently the intention of the union to extend the boycott to all parts of the Dominion where local unions existed, the company obtained a number of the letters that the union had sent out and immediately applied to the courts for an injunction to restrain the union from wrongfully interfering with the company's business, and on the 22nd of August, 1902, through Mr. W. N. Tilley, of Messrs. Thomson, Tilley & Johnston, its solicitors, commenced an action in the courts for damages.

A Unique Case in Canada.

This is the first case in which the question has been raised as to the proper method of suing an unincorporated or unregistered trade union, and to establish the proper practice involves considerable expense, delay and trouble, which has been very much increased owing to the difference of opinion among the judges as to the proper stage of the proceedings at which to have the proper practice determined. In the Taff Vale Railway Case, decided by the House of Lords in England, which was against a registered union (as unions in England are obliged to register), it was held that the union could be sued under its collective name, and that if it could not be sued in that manner the proper course would have been to sue the principal members of the union, as representing themselves and all other persons constituting the union. The Taff Vale Company recovered £23,000 as damages, and this was paid out of the union funds.

The Union and Individual Members Sued.

Since there was no reported case as to the proper practice in Ontario, the Metallic Roofing Company brought its action against the union, under its collective name, and in addition sued the principal members as representing themselves and all other persons constituting the union. The company at once applied for an interim injunction restraining the union from interfering with its business, and an order was made by Chief Justice Falconbridge, on the 25th of August, 1902, which was afterwards continued until the trial by Chief Justice Meredith, in so far as it restrained the defendants from boycotting the company's goods. The union appealed from this order to the King's Bench Divisional Court, but the appeal was dismissed on the 24th of March, 1903. The union moved before the Master in Chambers, on the 5th of September, 1902, to strike out the local union as a party to the action on the ground that it could not be sued under that name, but the master, after reserving judgment, dismissed the application because he considered the question should be decided at the trial. On an appeal from that order, Mr. Justice Street directed that the question should be determined on the application and not at the trial, and he made an order binding the defendants by the result of the motion, so that they would not be able to raise the question again at the trial, and he adjourned the motion so that the parties could put in further evidence. Afterwards the motion came on to be heard before Chief Justice Meredith, on the 29th of September, 1902, but he refused to hear the motion on the ground that it was not a proper matter to be determined on the application, but should be disposed of by the trial judge, and he dismissed the appeal, but varied the master's order so as to show that the question should be disposed of by the trial judge.

The Suit Widened.

Statement of claim was then filed, and the union raised the question as to its status and liability to be sued. When the writ was issued, it was understood by the company that the International Association was not a party to the action taken against the company by the local union, and had not sanctioned the strike, but upon learning that the International Association was supporting the local and contributing a portion of the sinews of war, an application was made by the company to the Master in Chambers, and on December 24th, 1902, an order was made by him adding the International Association and others as defendants.

The writ of summons was then amended and served on the First Vice-President of the International, who resides in Toronto. The International Association thereupon moved before the Master in Chambers to set aside this service on the ground that it was not a body corporate, nor a partnership, nor was there any provision for getting at it under the rules of practice. This in effect raised the same issue regarding the International as had already been raised regarding the local union. An appeal was then taken to the Divisional Court and was argued February 20th, 1903, before Chief Justice Meredith and Mr. Justice MacLaren, and judgment was reserved until March 3rd, when judgment was given, setting aside the service, the court at the same time pointing out that the proper course to pursue was to obtain an order directing that the individual defendants should represent themselves and all other members of the International.

An Important Pronouncement.

An order was then made by Chancellor Boyd, directing that the individual defendants should represent all other persons constituting both the local and the International, and that all such members should be bound by the proceedings in the action, but as the defendants disputed that under the rules of practice in operation in this Province, the court could bind absent parties in a representative action in such a case as this, the order contained a clause permitting the defendants to raise in the pleadings the question as to the jurisdiction of the court to make such an order, and to have the same determined by the trial judge. The pleadings in the action were then perfected. Numerous examinations for discovery were had and the evidence of the Secretary of the International was taken at Kansas City before a commission appointed for the purpose, and certain correspondence that had taken place between the local and the International was taken possession of. This correspondence clearly showed the conspiracy that existed and the apparent intention of the union to do the company all the injury it possibly could.

The case came on for trial at the Spring Assizes in Toronto, but was not reached, and stood over until the fall, when it came on for trial on the 21st of September, but Chief Justice Meredith, the trial judge, refused to try the action because he thought the question as to the jurisdiction of the

court, which was reserved under the order of Chancellor Boyd to be determined at the trial, should be determined before the trial, and he stated that the question as to the service of the writ on the International, which had been determined against the Company by the Divisional Court, and the question as to the power of the court to proceed against an absent party in a representative action, should be taken to the Court of Appeal, so that the law as to the proper method of suing a trade union in Ontario could be finally settled by the court, and he struck the case off the list.

The company thereupon applied to Mr. Justice MacMahon for an order directing representation without any such reservation, and he directed representation as to the local, but refused it as to the International.

The company thereupon applied to Mr. Justice MacLennan, of the Court of Appeal, and obtained an order allowing it to appeal from the order of the Divisional Court, which had set aside the service on the International, and to combine it with an appeal from the order of Mr. Justice MacMahon, who had refused to order representation as to the International.

The International Union Made a Party.

The company then paid into court the amount required by the rules as security for costs, and the reasons for and against appeal were delivered, and the appeal set down to be argued. Since the proceedings were pending in the Court of Appeal, the union applied to the Master in Chambers to set aside the service of the writ on the local union, but the master adjourned the motion until judgment had been given by the Court of Appeal. The appeals were argued on the 17th and 18th days of February, 1904. Judgment was reserved and not delivered until January 23rd, 1905. The company's appeal from the order of Mr. Justice MacMahon, refusing a representative order as to the International, was allowed with costs, and the union's cross appeal therefrom, as to the local union, was dismissed with costs.

No appeal has been or is likely to be taken against this judgment of the Court of Appeal, as it is hardly conceivable that the Supreme Court of Canada would interfere with any judgment of the Court of Appeal for Ontario, as the question is one concerning the practice and procedure of the court. The question of procedure is, therefore, finally settled in Ontario, and so long as unions remain unregistered under the Trade Union Act actions against them should be brought against certain of their officers and most prominent members, and an order of the court should be obtained directing that the persons so named and served with the writ should, besides representing themselves, represent all other persons constituting the union, and that such other persons shall be bound by the proceedings and the judgments in the action.

A Test Case.

Many actions against other unions have been stayed pending this appeal in the Metallic case, it being regarded by the judges in the nature of a test case to settle the practice in all cases. Other actions will now proceed, and, no doubt, many trials in union cases will take place.

Damages Awarded to Company.

The case finally came on for trial before Mr. Justice MacMahon and a jury, and the company obtained a permanent injunction and a verdict for $7,500 damages, together with costs. The union immediately applied to the Court of Appeal with a view to preventing execution being issued against the International, the local and the individual defendants, it being the company's intention to get after the whole of them. The appeal was argued and judgment delivered on April 22nd, 1907, by five judges of the Court of Appeal, and the court was unanimous in confirming the verdict that had been rendered by Mr. Justice MacMahon and the jury. The union thereupon endeavored to get the Court of Appeal to prevent execution being issued until it had had an opportunity of applying to the Privy Council in Great Britain, but this was refused. Execution has consequently been issued and active steps are being taken towards enforcing the judgment that has been obtained. Many difficulties, previously foreseen, have been met with, and the Company within the last few weeks obtained an order from the court appointing it official receiver of the union funds, and the individual defendants have been ordered to pay their dues to the company instead of to the union.

As an illustration of the great importance attached to this judgment by labor unions generally, attention is drawn to the fact that at the last annual convention of the Trades' and Labor Congress, held in Vancouver, composed of representatives from nearly all the labor unions in Canada, it was unanimously decided to carry this case to the Privy Council, and a special levy was made against every union man in the Dominion for the purpose of raising a fund to carry the appeal to the Privy Council. The union's solicitor sailed for Great Britain a short time ago, and the company's solicitor has also left for there to argue the matter before the Privy Council.

A Vital Principle Established.

It will be observed that the Metallic Roofing Company has succeeded in effectually demonstrating the fact that international unions, local unions and individual members thereof, can be held responsible for their unlawful actions, and the company has thereby rendered a service of considerable value to employers generally. They have carried on this litigation for nearly five years, and now both the international and the local, realizing the position in which they and all other unions are placed by this successful litigation, and the danger of taking their last chance by appealing to the Privy Council in Great Britain, have approached the Metallic Roofing Company with a view to settling with them.

The union apparently is anxious to get leave to appeal to the Privy Council without putting up security for costs, and it is quite evident that if labor unions can appeal to the Privy Council without putting up security, notwithstanding that the unions may be worth considerable money, a method is ready to hand for dragging out litigation and piling up costs that will, no doubt, be resorted to on every occasion that a judgment is rendered against a union, and that should a precedent be established whereby an appeal may be taken to the Privy Council without security, it is safe to say that an attempt will be made to carry every judgment against a union to the Privy Council, which means that litigation with a union will not end within two or three years from the time that it is commenced; therefore, the company is to be commended for its action in opposing the appeal that has been taken to the Privy Council, and we venture to say that the company's action in proving that boycotting is illegal, and in fixing of responsibility for unlawful acts, will do more towards causing unions to be more amenable to reason and towards bringing about industrial peace in Canada, than anything else that has so far taken place.

The Liberty of Labor.

The Toronto *News*, of June 20th, in reporting an interview with Mr. Goldwin Smith, states, in part, as follows:

"As Mr. Goldwin Smith is known to have been one of the staunch friends of the unions and of the labor interests generally, in England, our reporter asked him for his opinion on the present situation. He replied: 'It is true that I was one of those who heartily upheld the cause of the unions, but we never thought of setting on foot a monopoly of labor in the hands of self-constituted and self-regulated associations. This would have been something like a reproduction of the old guilds, which became, as such exclusive bodies are apt to become, corrupt in themselves and nuisances to industry and trade. We never dreamed of putting an end to freedom of

labor or persecuting any man for earning his bread in his own way or making the best use of his natural powers!' "

It may be pointed out that an attempt has been made during the past five years to ruin the business of the Metallic Roofing company, simply because the company refused to either drive into the union or turn upon the street workmen who had been in its employ for several years, and because it refused to enter into an agreement with an unincorporated union, it being well known that prior to that time unions had always refused to register or become incorporated, apparently because they desired to escape responsibility.

Attention may also be drawn to the fact that the company had never had an agreement with any labor union since it commenced business twenty-two years ago, and while it had no fault to find with any well-conducted union, it certainly did not propose to permit any union to force it into dealing in such an unjust and tyrannical manner with its non-union workmen.

Attention is also directed to Mr. Goldwin Smith's remarks, as published in the Toronto *News*, in which he says : "I cannot help saying that I think we have a right to demur to the interference of American labor leaders with our disputes."

THE CANADIAN RAILWAY EXHIBIT BUILDING.

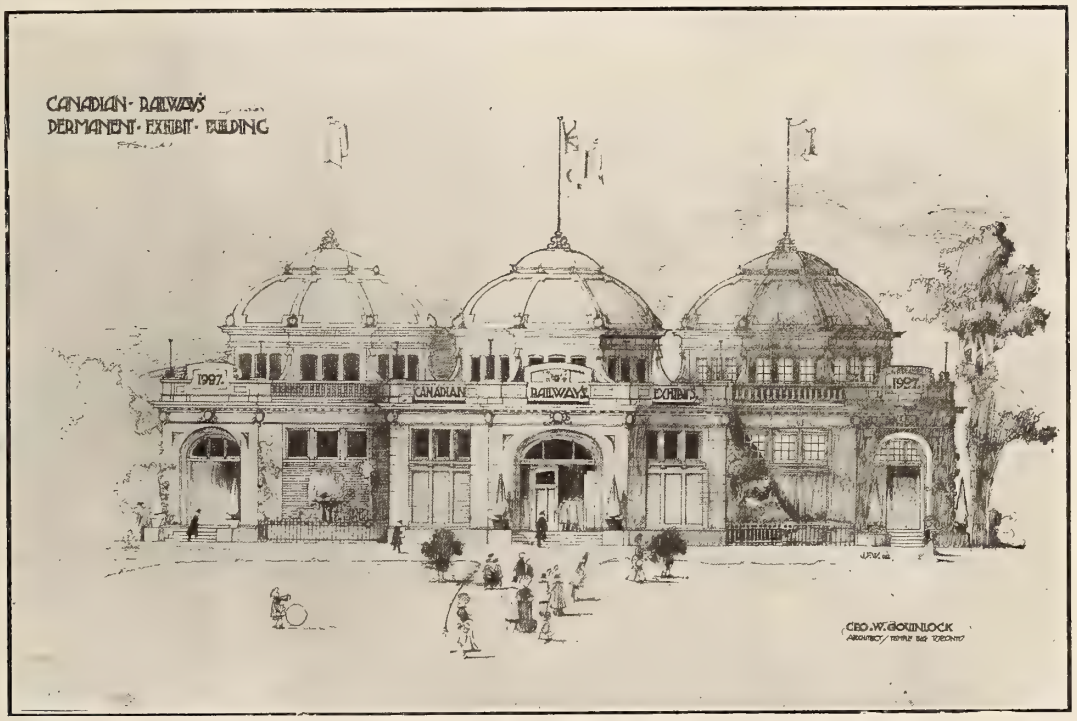
The latest addition to Toronto's Exhibition Park will be a large capacious building for the Canadian railways, forming a permanent building for their exhibits. In plan it will take the form of three octagonal halls, joined together by a central passage, with toilet rooms and offices adjacent. Three large entrances are provided, 14 feet wide, with terrace of steps to each ; a shipping platform opening on to each hall being provided at rear.

Abundance of light is obtained from sides and through large domes above. Dimensions of each hall are 62 x 62 feet, making a total frontage facing each road of 120 feet. The general exterior is designed to give a pleasing and subdued effect to the eye, stone and brick being blended together, with just the necessary ornament to make one harmonious whole. Surmounting the structure are three large ornately proportioned domes, giving the necessary light, air space and picturesque sky-line to the building. Space is provided by stone panels for all necessary inscriptions and signs over each main entrance. Twenty-two feet in height is provided for stringing of domes inside. The total height from floor to top of done is about 56 feet in all.

When completed the structure will rank as one of the most picturesque, well planned, convenient and useful buildings standing in Toronto's Park of Exhibits. The estimated cost is $40,000.

HOME-MADE GOODS TO THE FRONT.

Made-in-Canada fairs are becoming popular. Guelph is the latest city to take up the idea, and the results were eminently satisfactory. The Canadian idea is strong just now, and the way in which such fairs succeed should be an incentive to its further development. It is not only patriotic, it is good business, to trade at home, to buy goods which were made in Canada. After all a state is co-operative in its nature. A man cannot succeed unless the people with whom he has to deal are successful. A successful farmer or manufacturer presupposes a prosperous class of buyers of their respective products. It behooves us all to buy Canadian made goods as far as possible. By so doing everyone will have a wider field in which to carry on his own business. The sentiment is existent. All that is required is to have it called into force occasionally. Made-in-Canada goods reigned supreme in Guelph for a week. Let the good work continue.



New Railway and Transportation Building, Canadian National Exhibition, Toronto.

The International Harvester Co. will build an addition to their plant in Hamilton. The addition will be in reality a distinct plant, in which gas and gasoline engines will be built. Hitherto these have been made altogether in the company's works at Milwaukee. Their Canadian trade has grown so extensively, however, that it has been decided to start a plant here.

Among the Industries

The furniture factory of Wm. Cyr, in Ottawa East, was destroyed by fire recently.

A new sawmill is to be set up on Nickomen Island, B.C. The machinery has already been delivered.

A. M. Souter & Co., furniture manufacturers, Hamilton, suffered a $2,000 loss by fire during the month.

The flax-mill owned by the J. & J. Livingston estate in Listowel was destroyed by fire during the month.

A pork packing plant will be established at Ducks, B.C. Senator Bestock is largely interested in the venture.

The sash and door factory operated by E. W. Tobin, M.P., at Bramptonville, P.Q., was destroyed by fire recently. The plant and stock were a total loss.

The acid plant of the Dominion Pulp Company's mill at Chatham, N.B., was destroyed by fire recently. The loss is estimated at $11,000, with $7,000 insurance.

The flour mills of Lawson & Bros., Esquesing, were destroyed by fire recently. The building and machinery were valued at $8,000, and the contents at $10,000.

The new furniture factory in Peterborough is now in running order. T. A. Oke, formerly of Cobourg, is at the head of it. The company will make book-cases, cabinets, etc.

A flour mill will be erected at Macleod, Alta., having a capacity of 250 barrels a day. The mill will cost $50,000. The town of Macleod has given a free site for building purposes.

A big warehouse will be erected in Brandon, Man., by Sylvester Bros., the Cockshutt Plow Company, and Smith & Inglis. The structure will be 400 by 80 feet, and will be two-storeys in height.

The citizens of North Sydney are making a strong effort to have the new steel castings plant of the Sydney Foundry and Machine Co. established in that town. Liberal inducements are being offered.

A company are contemplating establishing a condensing plant in Woodstock. This will be of great benefit to the dairying interests which centre in that district. The industry will employ seventy-five hands.

Mason & Campbell and William Gray & Sons, both firms of Chatham, Ont., will build a warehouse this summer in Brandon, Man. The building will be 80 by 150 feet, and either three or four storeys high.

The Redcliffe Lumber Company, of Duluth, have acquired extensive timber areas in the Alberni District of Vancouver Island. The company intend to build one of the largest mills on the coast, on the Alberni Canal.

The Fraser River Tannery, New Westminster, B.C., is being equipped with new machinery. The plant is being considerably extended, and an increased output will be possible as soon as the present changes are made.

The International Heating and Lighting Company are considering establishing a plant in Edmonton. If they do they will employ a considerable number of men, and be of great advantage to the city from an industrial standpoint.

The Ontario Structural Steel Co. has been organized, and as soon as the charter is secured work will be begun on the plant. A site has been secured in Walkerville. The company will manufacture structural steel for bridges and buildings.

The R. R. Stoner Land Co., of Medicine Hat, are experimenting with some clay deposits, preparatory to establishing a brick works. Satisfactory results followed the preliminary tests, and it is expected that work will be proceeded with at once.

Shaw & Mason, Limited, have let the contracts for a new three-storey factory building in Sydney, C.B. It will be used for a brass and iron foundry, nickel-plating shop and general metal working establishment. Rhodes, Curry & Co. are the builders.

A serious loss by fire was suffered by the Canadian Shipbuilding Co., on June 11th. The plant is so situated that no adequate assistance could be given by any neighboring town. The main building, valued at a quarter of a million dollars, was destroyed.

By an almost unanimous vote the citizens of Owen Sound have decided to loan $15,000 for a term of 15 years to the Bell Furniture Co. According to the terms of the agreement the company must spend $25,000 on a building, which will be security for the municipal loan.

R. J. Graham, of Belleville, Ont., manager of the Canada Lands Produce and Cold Storage Company, will erect a series of evaporating plants and canning factories through New Brunswick. He is figuring on building ten factories, all to be completed this fall.

The new factory of the Gilson Mfg. Co., Limited, at Guelph, Ont., Canada, is now ready to start operations. The plant is modern and up-to-date and fully equipped, with everything necessary for the economical production of the famous "Goes Like Sixty" engines.

The Brandon Construction Co. have secured the contract for the new winter fair and stock pavilion, which will be erected at once in Brandon. The building will cost over $30,000. The same company will build the depot in Brandon for the Great Northern Railway.

The Medicine Hat Milling Co. have applied for a civic loan of $7,000, to assist them in erecting a new elevator. This would double the capacity of their present plant, which has already been an important industry to the Western city. The cost of the addition would be $20,000.

The C. P. R. have instituted a new train service across Canada, which will excel any transcontinental service now given by any road. It will make the trip from Montreal to Vancouver in 84 hours. The Canadian route is steadily winning a larger share of the coast to coast trade. Its service justifies it.

Situations Wanted

NOTE.—For further particulars regarding any applicant mentioned below, apply by number to the Secretary at Toronto, stating wages, whether work will be permanent, and giving such information as you think advisable. For all help secured through this medium, our regular Labor Department charges will be made.

Brass Workers.

1 **Fitter and Turner.**—Liverpool man, married, with considerable experience on a lathe, in brass and iron work, well up in hand turning and cutting, wishes employment in his trade in Canada. Has also had some experience at steam-fitting and electrical work. Good references.

2 **Moulder.**—Young Scotchman, seven years' experience in locomotive works as a brass moulder, is anxious to come to Canada. Union man, good references.

3 **Brazier and Tube Maker.**—Young married man who has worked nine years in large band instrument makers' shops, wants position as a metal worker, brazier or tube maker in Canada. Has had long experience at brass and copper work, and can run a lathe. Is member of union not represented in Canada.

Carpenters and Joiners.

4 Young married Englishman with considerable experience as a **Shop Fitter,** and qualified to take a position as general foreman in any carpentering work, wants position in Canada. Good references, non-union.

5 Young man, single, with six years' experience in a builder's work shop, competent **Carpenter and Joiner,** wants work in Canada. Non-union, and good references.

6 **Cabinet Maker.**—Who has been working for years in London, England, with a mantel and looking-glass manufacturer, is anxious to communicate with Canadian manufacturers who can give him employment in his trade on arrival in Canada.

Compositors.

7 **General Letter Press Printer.**—With 20 years' experience in a first-class English office, wants position in Canada in printing office. Has knowledge of machine ruling, die stamping, office work, etc. Married, union, and excellent testimonials.

8 **Music Compositor and Monotype Operator.**—15 years' experience in American and English houses, wants position in Canada. Former union man, married, with good references.

9 **Machine Minder.**—Young man with four years' experience in printing shop as machine minder. Non-union. Would come to Canada if he could secure position at his trade.

Engineers.

10 **Engine Driver and Fitter.**—Young Englishman, married, with thorough experience with locomotive, traction engines and steam cranes, etc., wants position in Canada. Non-union, good references.

11 **Locomotive or Crane Driver.**—Young Englishman, single, with several years' experience with Great Western Railway Co., wants position in his trade in this country. Non-union.

12 **Engine Driver.**—Married Englishman coming to Canada wants position as engine driver here. Has had 14 years' experience at driving and stoking in the Old Country, and is accustomed to all kinds of engines, dynamos, etc. Non-union.

13 **Marine Engineer.**—Young Welshman, single, who has served his apprenticeship as a marine engineer, wants position at marine or any general engineering work in this country. Has had experience at repairing, improving and tool-making, and is thoroughly qualified at every branch of the trade. Excellent references. Non-union.

14 **Marine Engineer.**—Londoner, married, with long experience with marine engines and boilers on all kinds of steamships, wishes to secure employment in Canada ; is thoroughly qualified to run any engine or locomotive, and is a good, handy man with machinery of all kinds. Non-union, and splendid references.

15 **Marine Engineer.**—Young Englishman, single, with 12 years general engineering experience, 5 years with the Taff Vale Railway and 7 years' marine experince, the last two as chief engineer, would like a position in Canada. Holds a first-class Board of Trade certificate. Non-union and excellent references.

16 **Mechanical Engineer Foreman.**—Young Englishman with 8 years' experience at general engineering work, during part of which time he supervised the work of others, wants position in Canada. Would make a good handy man for any factory as a general repairer of machinery and tools. Non-union and good references.

17 **Mechanical Engineer.**—Englishman with 14 years' experience with hydraulic machinery and gas engines, and considerable general engineering experience, wants position in Canada. Has served some time as an engine erecter and millwright. Testimonials on request. Non-union.

18 **Mechanical Engineer.**—Young man with 4 years' general engineering experience, who can do engine fitting, testing, millwright's work, and turning, wants position in Canada. Good references, Y. M. C. A. man, non-union.

19 **Mechanical Engineer.**—With good technical training, nine years' experience, chiefly at repairing machinery and pattern-making, would like position in Canada. References. Non-union and educated.

20 **Mechanical Engineer** with 20 years' experience on all classes of engines, marine and stationary, accustomed to all kinds of work around machinery, with good testimonials, wants a position in an engineering establishment in Canada. Excellent references. Non-union.

21 **Engine Fitter.**—Englishman, widower, with over 20 years' experience in the best English engineering works, accustomed to all kinds of heavy, high power, machinery, in connection with water-works systems, power houses, etc., wants position in Canada ; non-union and well recommended ; is handy at general repair work ; wants passage advanced.

22 **Marine Draughtsman.**—Young Scotchman with 20 years' experience as general draughtsman in large marine engine works wants position in Canada ; has had considerable experience with refrigerating machinery, and at erecting machinery also. Good references. Non-union.

23 **General Engineer.**—Young Scotchman, married, with 18 years' experience as a general engine driver on marine, traction, gas, and refrigerating engines, and cranes and other heavy machinery, wants position as engine driver in this country. Good refernces. Non-union.

24 **Mechanical Engineer.**—Young Scotchman with 15 years' experience at general engineering work in Scotland, the Transvaal, Argentine Republic, accustomed to repair work, wants position in Canada. Non-union.

25 **Mechanical Engineer.**—Young Englishman with 8 years' experience in all kinds of engines, turbine, steam and gas, cranes, etc., wants position in Canada. Has some knowledge of electrical machinery and office work in engine plant. Good testimonials. Non-union.

26 **Engine Fitter.**—Young Scotchman with 7 years' experience in the best Scotch engine plants at fitting and erecting engines, wants position in this country at his trade. Has good general knowledge of all kinds of machinery, and can furnish excellent references. Union man.

27 **Engine Fitter.**—Young Englishman, single, with 5 years' experience at general fitting of machinery in boot and shoe hosiery factories, wants position at his trade in Canada. Has first-class general knowledge of engine fitting and is accus-

tomed to electrical machinery; non-union, and excellent certificates of merit.

28 **Draughtsman.**—Young Englishman with 6 years' experience in drawing office of first-class English engineering firm, wants position in Canada at similar work. Is competent to act as assistant engineer and is thoroughly competent in design and calculating work ; excellent references ; graduate of technical institute of good standing in England.

29 **Mechanical Engineer and Draughtsman.**—Englishman, with 10 years' experience at general engineering work, wants position in Canada. Has served apprenticeship with a large firm of makers of lifting machinery. Has also had considerable experience with high speed steam and gas engines and hydraulic machinery. College graduate and has worked in New York and South America as well as England.

30 **Mechanical Engineer.**—Young Englishman, with 14 years' experience in fitting and erecting engines, who has worked in the pattern shops at turning, wants position in engine establishment in Canada. A thorough knowledge of all kinds of machinery and good references. Non-union.

31 **Stationary Engineer.**—Englishman with 5 years' experience as stoker, on large boilers, and considerable experience as engine repairer in public institutes, wants position in large hotel or factory in Canada. Non-union. References.

Electricians and Electrical Engineers.

32 **Telephone Electrician**, with 4 years' experience as a general electrician in the telephone and switch-board department of a Liverpool firm, wants position in Canada ; is competent to instruct operators and at general repair work.

33 **Scientific Instrument Maker.**—Middle-aged widower with life experience in the making of electrical instruments, and other high-grade scientific apparatus, wants position in Canada. Has some knowledge of optical instrument making, and has worked for the best English firms. Member of the Mathematical Instrument Makers' Society.

34 **Electrical Engineer.**—Young Englishman with first-class technical training, and a thorough practical experience at all kinds of electrical engineering work in the best English establishments, wants position as supervisor in large Canadian electrical engineering works. Has served as chief works assistant in good English house, and is thoroughly competent to take charge of men. Excellent testimonials.

35 **Electrical Fitter.**—Englishman with thorough knowledge of switch-board and dynamo work, wants position as an electrical fitter with a good firm in Canada, good references, thoroughly competent. Non-union.

36 **Instrument Maker.**—Young married man, with 11 years in good English houses as a general instrument maker, wants position in Canada. Member of Trade Society ; good references and has knowledge of general electrical work.

37 **Electrical Fitter.**—Young married Englishman with 10 years' experience as a fitter in charge in large English electric plant, and good knowledge of motors, switches, etc., wants position in Canada. Non-union. Good references. Submits photograph of himself.

38 **Apprentice for Electrical Engineering Works.**—Englishman wants to place his son as apprentice with electrical engineering works in Canada, preferably in Toronto.

39 **Electrical Engineer.**—Young Englishman with 4 years' experience as engineer in charge of electrical apparatus in an asylum, wants position in Canada. Has good working knowledge of lighting and wiring. Non-union. Excellent references.

40 **Electrician.**—Young married Englishman, with 12 years' experience in lighting and telephone plants, wants position in electrical works. Non-union. Good references.

41 **Electrical Fitter's Improver.**—Young man, with 2 years' experience as electrical fitter's improver, wants similar position in Canada. Non-union.

Fitters and General Mechanics.

42 **Fitter and Turner.**—Young Englishman with 7 years' experience as an engine fitter and turner in first-class English works. Good knowledge of high-grade engines, wants position in engine works in Canada. Good references. Member of Amalgamated Society of Engineers.

43 **General Fitter**, with 10 years' experience gas and water-works, and considerable knowledge of engineering, wants position in Canada. Has worked as locksmith. German by birth, with excellent references. Non-union.

44 **General Fitter.**—Young Englishman who has served apprenticeship in good English works as engine fitter, wants position in Canada. Has a general knowledge of engineering work and repairing. Can furnish good references. Non-union.

45 **Engine Fitter.**—Englishman with 15 years' experience as engine fitter, 3 years of which were spent in Africa, wants position in large engine works and locomotive shops. Non-union. Excellent references.

46 **Engine Fitter and Turner.**—Young Englishman with good technical training and considerable experience on locomotives, having been engaged in building and erecting them in all branches, wants position in Canada. Is a thoroughly competent man, and has some knowledge of marine engines. Served his time on the Great Western Railway. Member of Amalgamated Society of Engineers. Good references.

47 **Steam Fitter.**—Middle-aged Englishman with life experience at the plumbing trade, and practical experience as a tinsmith, sheet zinc and iron worker, wants position in Canada. Was formerly a member of the British Army, serving in the Royal Engineers, during which time he was employed as foreman of works. Has certificates for building construction and levelling. Non-union. Good references.

48 **Fitter and Turner.**—Young married Englishman, with 16 years' experience as a general machine fitter and repairer, wants position in Canada. Has a thorough knowledge of textile, brewery and dyeing machinery. Would be a handy man around any factory as a general machine repairer. Non-union. Good references.

49 **Fitter.**—Young man who has served his time as fitter in a tramway company in Wales, and has a thorough knowledge of machinery, wants position in Canada. Non-union. Good references.

50 **Fitter.**—Young Englishman, married, intending emigrant to Canada, wants position as steam fitter in this country ; total abstainer ; industrious and willing.

51 **Plumber and Sanitary Engineer.**—Middle-aged Englishman, married, with 26 years' experience at the plumbing trade, would come to Canada if he can secure position. Non-union. Good references and a thorough knowledge of his trade.

Machinists.

52 **Milling Machinist.**—Young Englishman with 8 years' experience as milling machinist, with good English firms, wants position in Canada. References. Member of the Amalgamated Society of Engineers.

53 **Machinist.**—Young married Englishman with 16 years' experience in engine works at slotting, planing and drilling machines, wants position in Canada. Union man.

54 **Telegraph Machinist.**—Young man with 4 years' experience in the Government telegraph works at repairing apparatus in the stores department, wants position in Canada. Good references. Member of the Stores' Association, G.P.O., England.

55 **Machinist.**—Married Englishman with 17 years' experience in the British naval dock yards at milling, shaping, boring, drilling and screwing, is anxious to come to Canada if he can secure a position in his trade. Can secure good references. Non-union.

56 **Shaper and Planer.**—Young married man with 18 years' experience at his trade in good English works, wants position as shaper and planer in Canadian machine shop. Union man and can secure good references.

57 **Hand Miller.**—Young married Englishman with 14 years' experience at his trade, who has worked all classes of milling machines, horizontal and vertical profiling and slot drilling, with some experience at fitting, wants to come to Canada if he can secure work at his trade. Has references. Union man.

58 **Roll Turner.**—Young married Englishman with 20 years' experience as round turner in large iron works in England, who has served 7 years as head foreman in rolling mills, would come to Canada if he can secure good position. Non-union. References.

59 **Scale Fitter.**—Young Englishman with 12 years' experience as scale and weighing machine fitter, with some years' experence at the bench, wants position in Canada. Non-union.

60 **Metal Polisher and Nickel Plater.**—Young Londoner with 4 years' experience at his trade, working on bicycle parts and brass fittings for phonographs, would come to Canada if he could secure work. Non-union. References.

61 **Galvanized Sheet Iron Worker.**—Englishman, married, with life experience as a maker of galvanized iron goods, such as buckets, baths, water cans, etc., would come to Canada if he can secure position at his trade. Good references, sober and industrious. Some knowledge of the windmill business.

63 **Iron and Steel Sheet Roller.**—Middle-aged Englishman, married, with 20 years' experience in large English mills, accustomed to wide and narrow rolling of all thicknesses, wants position as sheet roller in Canada. Non-union. References.

64 **Planer.**—Young Englishman, with 9 years' experience with all kinds of textile machinery and engines, and some knowledge of marine engines, wants position in Canada. Good references. Was former secretary of local union, but is not now a member.

65 **Turner.**—Young man with 3 years' experience at turning and screw cutting on a planing and drilling machine in a large electrical works in England, wants position in this country. References. Non-union.

66 **Emery Wheel Turner and Grinder.**—Young married Englishman with 15 years' experience on an emery wheel and as disc turner for a card clothing grinder, wants position in Canada at his trade. Non-union, good references, and has also worked cylinder, plough and needle grinding machines.

67 **Tool Maker.**—Young Englishman with good technical training and long experience in the best English works, wants position as a maker of tools and gauges. References.

68 **Turner.**—Young man with 3 years' experience as turner on grist mill and agricultural machinery, and some experience at repairing engine pistons, cylinders, etc., wants position in Canada. Non-union. Good references.

69 **Metal Turner.**—Young Englishman with 3 years' experience at motor, tool and electrical machinery turning, accustomed to accurate work, by micrometer and limited gauges. Non-union. Good references.

Miscellaneous.

70 **Accountant for Snip Yard.**—A competent accountant and bookkeeper, with good testimonials and long experience in large ship and engine building and repairing works in Great Britain, seeks similar work in a large Canadian establishment.

71 **Brick Maker.**—Englishman, married, with life-long experience in the manufacture of machine and hand-made bricks and tiles, is anxious to secure work in a brick and tile factory in this country. Is accustomed to repairing brick making machinery and running engines. Has first-class references and has made a successful invention in bricking apparatus.

72 **Brick Maker or Manager for Brick Works.**—Competent man, 19 years' experience as a brick works manager and engineer in England ; 40 years of age. Is anxious to secure similar position in Canada. A good, all-round man, well recommended.

73 **Bridge Plater.**—Scotchman, with 16 years' experience in all classes of bridge and structural steel work, with the best Old Country firms. Will pay his own passage to Canada if he can secure work at his trade on arrival. Can take position as foreman, and has splendid references.

74 **Brewery Worker.**—Englishman, 10 years' experience as a tun room and copperside man in the best English breweries, is anxious to secure work at his trade in Canada. Can do any general work around a brewery, and will furnish references on request.

75 **Boot and Shoe Trade.**—Young Englishman, with 8 years' experience in a boot and shoe factory in England, sober and industrious, wants position as a clicker and pattern cutter in a Canadian shoe factory. Has worked on both men's and women's shoes. First-class references.

76 **Cheesemaker.**—Englishman, with thorough knowledge of the cheese-making business in England, wants to come out to Canada and obtain employment in his trade in this country. References on request.

77 **Architect.**—Young Englishman, with 10 years' experience at drafting and general surveying work in Kimberley, South Africa, wants position in Canada. Non-union. Splendid testimonials.

78 **Paper Warehouseman.**—Young Londoner, with 6 years' experience as warehouseman, in large London firm of paper dealers, well up in all lines of paper, wants position in Canada. Good references. Non-union.

79 **Clothing Warehouseman.**—Young Scotchman, with 7 years' experience in shipping department of a large Glasgow wholesale clothing house, well up in checking, measuring, etc., classing and testing yarns, wants position in Canada. Non-union. Good references.

80 **Dyer.**—Young married Englishman, with 16 years' experience as foreman dyer of pieces, wool and rags ; 22 years in the employ of one firm, wants to come to Canada if he can secure similar work. Non-union and first-class testimonials.

81 **Bleacher and Dyer.**—Young married Englishman, now residing in Portugal, with 16 years' experience in dyeing works, and a thorough knowledge of dyeing and bleaching in all its branches, has been in charge of the finishing and shipping room at the Oporto branch of a large English firm for some years, and is fully qualified in every particular. Good references. Non-union.

82 **Analytical Chemist.**—Young man with thorough technical training, graduate of a German technical institute, speaking French, German and English, wants position in Canada as analytical chemist or engineer. Member of the Society of Chemical Industry, and first-class recommendations.

83 **Coal Miner.**—Married Englishman, with 20 years' practical experience in all branches of mining work, the last nine years as colliery deputy, wants position in Canada as mining foreman. Excellent references. Non-union.

84 **Engraver.**—Young married Englishman, with 18 years' experience at the engraving trade, expert in the clamming branch, also with traverse and promiscuous pin, resinking, etc., wants position in Canada ; thoroughly versed in all branches of the trade. Excellent references. Union. Can do wall paper work.

85 **Card-board Cutter.**—Young married Englishman, with 15 years' experience in a card-board factory, good cutter, and with a long experience as machinery foreman, capable of doing all work in connection with the card-board trade. Gives full particulars. Non-union. Excellent references.

86 **Fruit and Jam Boiler.**—Middle-aged man, thoroughly up in all branches of the preserving trade, and 15 years' experience as master jam manufacturer. Would come to Canada if he could secure similar work, is now travelling for a jam house. Non-union. Excellent testimonials.

87 **Glass Beveller.**—Young married Englishman, with 15 years' experience at his trade in the best English factories, wants position in Canada as glass beveller. Non-union. References.

88 **Hosiery Manufacturer.**—Middle-aged, married, Nottingham man, thoroughly up in every department of the hosiery trade,

wants position in Canada in a hosiery factory ; can take charge of men, and is thoroughly experienced with hosiery machinery. Non-union ; can furnish references.

89 **Lithographer.**—Young, single Englishman, with 8 years' experience in a prominent London house at his trade, and two years' experience in Canada, wants position here. Not a union man at present. References.

90 **Locomotive Fireman.**—Young Englishman, with 7 years' experience as locomotive fireman, will come to Canada if he can secure similar work. Non-union. References.

91 **Mill Board Maker.**—Middle-aged, married Englishman, with over 20 years' experience as a mill board manufacturer, 9 years as fireman of works, wants position in Canada. Non-union. Excellent references.

92 **Photographer.**—Young married Englishman, with 15 years' experience in England and America in all branches of the photographic business, specialist on commercial publishing and engineering work, wants position in Canada. Can do excellent work, will furnish samples and testimonials. Non-union. Has been in business for himself.

93 **Colotype Plate Maker and Overseer.**—Young, single Englishman, with 12 years' experience in photographic work, thorough knowledge of collotype printing and post-card publishing, wants position in Canada. Has been overseer of printing departments for 5 years. Non-union. Good testimonials.

94 **French Polisher.**—Middle-aged London man, with 15 years' experience in all branches of the polishing trade, will come to Canada as French polisher, if position assured.

95 **Glass Painter and Decorator.**—Young single Englishman, with 15 years' experience in the business English houses as a glass painter, embosser and decorator, wants position of a similar nature in Canada. Has done some of the business work in London. Non-union. References.

96 **Timber Sawyer.**—Young married Londoner, with 12 years' experience as a timber sawyer in London and Australia, would come to Canada if position is assured in his trade. Non-union. References. Wants passage advanced on security of life policy.

97 **Wool Sorter.**—Young married Scotchman, with 21 years' experience in the wood business as classer, sorter and blender, both at home and in the colonies, would come to Canada if employment assured in his trade ; can take position as manager. Non-union. References.

98 **Soap Maker.**—Dublin man, anxious to come to Canada, wants position as soap maker. Has had good practical experience and can do all kinds of work.

99 **Ship Builder.**—Middle-aged Scotch ship builder, who has come through the various branches of ship-building and repairing, been manager of yards for 20 years, wants position in Canada in shipyards. Can look after men, or would start upon his own account if assisted. Non-union. Excellent testimonials.

100 **Blanket Manufacturer.**—North of England blanket manufacturer, who has run his own plant for a number of years, would like to obtain employment as a manager or foreman in a Canadian blanket house. Knows the trade from the raw material to the finished product, and is experienced in extracting wool for fine goods.

101 **Basket Maker.**—Edinburgh willow basket maker, intending emigrant to this country, wishes to obtain a responsible position with a good basket manufacturer. Is a specialist on spale work, and would be glad to start a factory of his own if assisted with some capital.

102 **Bookbinder.**—London man, with 5 years' experience at bookbinding, with a well-known London house, competent in all branches of binding, is anxious to secure work at his trade in Canada. Union. References.

103 **Chemical Maker.**—Young married Englishman, with 10 years' experience in the manufacture of nitric and hydro-chloric acid, ammonia and similar products, is anxious to come to Canada if he can secure work at his trade. Excellent references. Non-union. Will be ready to go out about the middle of July.

104 **Color and Paint Maker.**—Young London man, single, 14 years in the employment of one firm, is anxious to secure work in a paint manufactory in Canada. Is well qualified to make all kinds of colors and has a thorough experience. Non-union. Good references.

105 **Clay Moulder.**—Young man, married, with 8 years' experience as a chimney-top maker, and a thorough knowledge of the clay moulding and glazing business, wants position in Canada. Has also a knowledge of brick making. Good references. Non-union.

106 **Cloth Looker.**—Young married Englishman, with 16 years' experience in the employ of a bed quilt manufacturer, well versed in all that pertains to the woollen and cotton business, wants position in a Canadian factory or warehouse in his line. Good references. Non-union.

Printer and Compositors.

107 **News Jobbing.**—Compositor, with some experience on stone imposition, with good English firms, wants position at his trade in this country. Non-union. First-class references.

108 **News and Jobbing.**—Man, with some experience on Linotype matter make-up, and stone work in good English houses, wants position in Canada. References. Young, married, and non-union.

Smiths.

109 **Drill Blacksmith.**—Young, single Englishman, with 10 years' experience as drill blacksmith in Birmingham waterworks, wants position in Canada at his trade. Non-union. Good references.

110 **Shoeing and General Smith.**—Middle-aged married man, with 27 years' experience as a general blacksmith, registered and accustomed to every branch of smith work and repair, would come to Canada if he can secure position.

111 **General Smith.**—Young man, with 7 years' experience as an angle, ship, and engine smith in the Portsmouth dock-yards, wants position in Canada. He is a fully qualified journeyman, has good references. Union man.

112 **General Smith.**—Middle-aged married man, who has worked all his life as a general blacksmith with English railways and other large plants, wants position in Canada.

Watchmaker and Jewellers.

113 **Jewellers' Manager.**—Young married Englishman, with 15 years' experience in the jewellery business, wants position as manager or commercial traveller for a good house ; is well versed in the middle class trade. Non-union. Splendid references.

114 **Watchmaker and Jewellery Salesman.**—Young Scotchman, with 12 years' experience at watch and clock repairing, being in charge of whole store during master's absnce, wants position in Canada. Non-union. Excellent references.

115 **Watchmaker.**—Young man with 10 years' experience at the watch repairing trade, accustomed to turning and pivoting and general jewellery repairing, some shop experience, wants position in Canada. Non-union. Good references.

116 **Watch and Clock Repairer.**—Young man, with 9 years' experience at watch and clock repairing, wants position in Canada. Splendid references. Non-union.

117 **Watchmaker and Jewellery.**—Young man, with 6 years' experience at watch, clock and jewellery repairing and making, good at soldering and with thorough understanding of the best French and English clocks, wants position in Canada. Non-union. Excellent references.

Trade Enquiries

NOTE.—For further information regarding any inquiry mentioned under this heading or the names of inquiries, apply by numbers to the Secretary, at Toronto.

390 **Agent.—Sydney, Australia**, commission agent, with splendid connection and 16 years' experience in Australia and New Zealand markets, would like to hear from Canadian hardware manufacturers who desire to open up business in these markets. Excellent references.

391 **Agent.**—Experienced commercial traveller of **Birmingham, England**, with life experience at introducing goods all over world, would like to take on a few good Canadian firms in any line. Is about to start on a world tour, covering all big markets. Highest recommendations.

392 **Agency.**—A **Hampshire** firm in a position to sell large quantities of a fine, strong Canadian flour, would like to obtain the agency of a first-class Canadian milling enterprise.

393 **Apples.**—A **Leeds** fruit merchant is desirous of making arrangements for next season's trade, asks for Canadian shippers who can send him 150 barrels of apples per week.

394 **Ash Lumber.**—Former Canadian now in **Mexico** in the commission business wants to fill orders for 40,000 feet ash lumber, 1st and 2nd, in Canada. Exporters please state what commission they will pay. Good references.

395 **Axes, Hammers, Etc.—Birmingham, England,** man inquires for Canadian manufacturers of above tools who can give quick delivery to England.

396 **Barytes.**—A **Manchester** firm asks for prices, c.i.f Manchester, of barytes, all grades, from Canadian shippers.

397 **Bicycle Parts, Tires, Bolt and Nut Turning Machines.—Osaka, Japan**, firm of machinery jobbers, wants quotations for purchase from Canadian exporters of the above lines ; also on cold drawn steel, 3/16" 5/16" ¼". References.

398 **Birch, Oak and Hardwoods.**—A **Manchester** firm desires to obtain prices of birch, oak and other hardwood from Canadian exporters.

399 **Blankets, Carpets, Paper, Etc.**—Big firm of general commission agents in **South India** inquire for Canadian exporters of blankets, carpets, travelling bags, sugar paper, wall paper, linseed oil, oil cloth, advertising novelties, razors and umbrellas. Mean business and make a definite proposition for handling goods on a commission basis on a large scale. Enterprising house.

400 **Blankets, Carpets, Clothing and General Hardware, Etc.**—Osaka, Japan, firm of general commission agents, inquire for Canadian shippers of blankets, carpets, iron wire, nails, glass, of all kinds, ladies' and gentlemen's wear, chemicals. Want quotations c.i.f Yokohama, payment 90 days sight. Business on commission basis. Good references.

401 **Box Shooks.**—Ontario firm want quotations on shooks, knocked down, car-load lots. Good business if prices right.

402 **Broom Handles, Chair Legs, Reeds and Dowels.—London, England**, firm wants to hear from Canadian makers of broom handles, 50" x 1/8", chair legs and fronts, and chair reeds on dowels (dimensions at this office), who are in a position to fill orders for export. Quote per gross c.i.f., London, sending sample of each line.

403 **Cabinet Makers' Work Benches.—Ontario** firm of furniture makers want quotation on Canadian made carpenters' and cabinet makers' work benches.

404 **Canned Lobsters, Apples, Etc.**—A **London** firm possessing an established connection with the wholesale trade would be pleased to act for Canadian shippers of canned lobsters, canned gallon apples and other goods, and also evaporated apples.

405 **Casein.**—A **Manchester** firm asks for prices of casein from Canadian exporters of same.

406 **Cobalt Ores.**—A **London** company of manufacturing chemists wishes to get into correspondence with one of the Canadian companies smelting Cobalt ores, or with some firm in a position to offer the Cobalt matter which they produce.

407 **Curtain Poles and Fittings, Blind Rollers, Etc., Upholsterers' Leather.**—Well-known **Melbourne, Australia,** firm of commission agents, with splendid wholesale trade, would like to hear from Canadian exporters of linoleum, rugs and carpets, curtain covers, poles and fittings, blind rollers, chairs, upholsterers' leather and sundries. Wish quotations on large quantities for purchase; f.o.b. shipping port, cash in London. References excellent.

408 **Denims.—South African** commission agent would like to hear from Canadian manufacturers of 8 and 9 oz. blue and white denims who can export to South Africa.

409 **Dowels.**—A **Manchester** firm asks for prices of dowels, all sizes, in beech, birch and maple, bundled in gross lots, c.i.f, Manchester.

410 **Dowel Sticks.**—A **Birmingham** firm is open to purchase dowel sticks, 3 feet long, all diameters.

411 **Eggs.**—A **Cape Town, South Africa**, firm, with good connections, desires to get in touch with a Canadian firm who can export eggs in quantities direct to South Africa (not through a commission agent).

412 **Electro-plated Ware, Advertising Novelties, Cut Glassware.—Melbourne, Australia**, firm of wholesalers will purchase or sell on commission above articles of Canadian manufacture. Reference. Exporters please quote c.i.f., Melbourne.

413 **Evaporated Apples.**—A **Liverpool** firm now buying in the U.S. will welcome correspondence from Canadian shippers of evaporated apples, cored and cut in rings.

414 **Fleece-lined Underwear.—South African** firm of general commission agents can place good business in this line in Transvaal district if prices right ; 200 to 2,000 doz. ordered at a time. Want samples and prices. Also inquire for cotton balbriggan underwear.

415 **Fish Fertilizer, Asbestos Fibre and Sole Leather.—Tokio, Japan**, firm of wholesale exporters and importers wish to purchase large quantities of above goods from Canadian exporters. Good references ; mean business.

416 **Flour.**—A large **Rhodesian** firm holding good bank references, desires to be placed in communication with a reliable Canadian miller who can export regular supplies of first-class hard wheat bakers' flour. Quotations required, ci.f., Beira, for 100-lb. bags, which is the size required.

417 **Furniture.**—A **London** firm desires the addresses of Canadian manufacturers of furniture suitable for furnishing a commercial hotel in Egypt.

418 **Furnishings, Art Goods, Novelties.—Hastings, New Zealand**, general commission house, is anxious to receive catalogues and quotations from Canadian exporters of the above lines. Canadian references.

419 **Ham, Bacon, Cheese, Butter.—Yorkshire** produce firm are open to purchase small shipments of hams and bacon. They also inquire for Canadian shippers of cheese and butter (packed in casks).

420 **Iron Ware, Fine Hardware, Agricultural Implements.—Vera Cruz, Mexico,** commission house inquires for Canadian exporters of the above-named articles. Wants catalogues and quotations, f.o.b. Canada-Mexico steamships, at Canadian ports. Purchase on time. Excellent references.

421 **Lobster Pots.**—A **Cape Town, South Africa**, firm desires to get into touch with a Canadian exporter of lobster pots. When communicating quote prices and send illustrations direct so as to avoid delay.

422 **Lacrosse Sticks.—A Manchester** firm asks for prices of men's, youth's and boys' lacrosse sticks from Canadian makers.

423 **Millboard.—Ontario** furniture manufacturer is in the market to purchase quantities of millboard for glass-backing in mirrors.

424 **Milk and Cream Testers.—Sydney, Australia**, firm wish to purchase these articles from Canadian manufacturers. Very reliable house ; good business in sight.

425 **Minerals.—A Birmingham** firm wishes to hear from Canadian shippers of all kinds of minerals.

426 **News Print Paper.—Prominent Tokio, Japan**, firm of general commission agents are open to buy from 300 to 500 tons per month of news print paper from Canadian exporters, 32" x 43"—41 lbs.—in rolls and sheets. Will purchase cash against shipping documents. References good.

427 **Picture Frames, Mouldings and Sheet Pictures.—A** general dealer in **Newfoundland**, desires to be put in communication with manufacturers of picture frames, mouldings and sheet pictures in Canada.

428 **Phosphate of Lime.—A Liverpool** firm wishes to correspond with Canadian shippers of phosphate of lime.

429 **Potash.—London, England**, and **Hamburg, Germany**, parties inquire for Canadian shippers of potash ; 3,000 barrels a year can easily be taken ; must be able to compete with American stuff and be Government branded. Reputable parties inquire.

430 **Picture Frame Mouldings, Ash, Oak, Chestnut, Etc., and Fancy Wall Brackets.—**Large **Melbourne, Australia,** firm of picture frame dealers want quotations for car-load lots, f.o.b., nearest Canadian port, on above material. Cash against documents for purchases. A1 references.

431 **Roofs for Railway Car Interiors, Etc.—**Inquiry is made for names of Canadian firms in a position to export built-up roofs and panelling for railway car interiors, roofs of automobiles, etc., there being a considerable demand for three-ply veneer of the kind.

432 **Rough Wood Pulp.—A Cape Town, South African,** firm holding good references, desires quotations for very rough wood pulp.

433 **Salmon, Game and Poultry.—A Birmingham** firm importing salmon, game and poultry, would like to hear from Canadian shippers.

434 **Sawdust.—A Cape Town, South Africa,** firm holding good references, desires to ascertain the price of sawdust, c.i.f., Cape Town, packed as tight as possible, so as to save freight, in very large quantities, cash against documents. Weight of a cubic yard, packed not too tight, and information as to whether hard or soft timber has been used. Lowest price absolutely necessary and indications as to regularity of supplies.

435 **Sawn Squares of Soft Wood.—Sunderland, England,** house want quotations from Canadian exporters of redwood, basswood and poplar squares, in large or small parcels. Specifications at this office. Good order in sight. References.

436 **Seagrass or Dry Seawood.—English** upholstery house are in the market to buy considerable quantities of dry seaweed or other material suitable for upholstery work. Large order in sight and permanent connection. To be done up in bales of 200 lbs. weight.

437 **Spruce or Fir Boards.—**Well-known **Manchester, England,** lumber merchant, wants quotations from Canadian shippers on spruce or fir boards, ¼" thick, 6" and up wide, 8' long. Knots no objection if sound. Quote, c.i.f., Manchester, for cash on arrival of vessel. Quantity required, 100,000 square feet. Canadian or bank references.

438 **Sulphite Pulp and Wood Pulp.—Osaka, Japan**, well-known firm of general commission agents wants quotations of all kinds of pulp, c.i.f., Kobe, from Canadian exporters. Will take 50 tons per month on commission or purchase. Payments, 90-day draft. References first-class.

439 **Studs for Laundry Purposes.—A London** firm making a specialty of laundry supplies would be pleased to hear from any Canadian manufacturers of studs for laundry purposes seeking export trade.

440 **Tallow, Oils, Wood Pulp and Sulphite, Paper, Rubber Goods, Fertilizer, Butter and Cheese and Fertilizer.—**Large firm of general importers and exporters in **Tokio, Japan,** wholesale, want to purchase the above goods in Canada ; 60 or 90 days draft, excellent bank references. Quote f.o.b., Vancouver or New York.

441 **Tar.—A Cape Town, South African,** firm holding good references, desires quotations for the cheapest kind of tar in casks. Lowest prices absolutely necessary.

442 **Timber and Pulp Wood.—**An **English** correspondent, who is open to represent Canadian owners of timber and pulp wood properties, and who is able to dispose of large quantities of timber, etc., in England and abroad, desires to hear from parties who have propositions likely to interest him.

443 **Timber.—Liverpool** firm would like to hear from Canadian shippers of timber.

444 **Soap Boxes.—A Liverpool** firm is open to purchase soap boxes, inside measurement to be 14¼ x 11½ x 8½; ends, ¾ thick, tops, bottoms and sides, 3/8 thick.

445 **Wheat, Flour, Butter, Etc.—**A trading company doing business in **Shanghai**, desires to be put in communication with Canadian exporters seeking a market in China. This firm will handle wheat, flour, lumber, butter and other products. They desire to represent Canadian houses on commission, and wish to be supplied, where possible, with f.o.b. and or c.i.f. prices.

The offices of the old established firm of Fetherstonhaugh & Co., Solicitors of Patents, Engineers and Experts (of which Mr. Fred. B. Fetherstonhaugh, M.E., Barrister and Solicitor, is head) have not been removed, and are still in the Canadian Bank of Commerce Building, 19 to 25 King Street West, south side. The name of the firm is still Fetherstonhaugh & Co. The old firm has no connection with a firm which has recently commenced business with the name "Fetherstonhaugh" prominently at the head of its firm name.

English financial papers announce that the J. I. Case Manufacturing Co., of Racine, Wis., have issued bonds, the proceeds of which will be used to build a factory in Fort William. The Case Company have owned 192 acres of land just outside Fort William for three years, but they have hitherto refrained from making any declaration of their ultimate intentions. If their intention, as outlined in the above report, is correct, it will mean a big increase to the manufacturing plants of that district.

E. A. Edmonds, manager of the Rhinelander Paper Company at Rhinelander, Wis., has just closed an immense deal with the Spanish River Pulp and Paper Company, of Espanola, involving a cash outlay of $2,500,000. By the terms of agreement Mr. Edmonds comes into possession of extensive manufacturing industries and property of the above company in Ontario. The concession takes in the Ground Wood Pulp Mill, turning out 135 tons of ground wood pulp per day, also a dam furnishing a minimum horse-power of 18,000, of which 11,000 horse-power is now being used. Many dwelling houses are numbered in the transfer. The mill is located 145 miles east of Sault Ste. Marie, and has been in operation but little over a year. With the mill plant and its connections goes the concession granted by the Ontario Government giving the Spanish River Company the right to cut all the timber on a tract of 5,000 square miles. Edmonds will manufacture pulp board in connection with the regular output of the mill.

TRADE NOTES.

The Smart-Turner Machine Co., Limited, have supplied The Stoney Lake Navigation Co., Young's Point, with one of their Duplex Pumps.

The Smart-Turner Machine Co., Limited, Hamilton, have supplied the Canadian Canners, Bell River, Ont., with one of their Duplex Pumps.

Messrs' R. H. Buchanan & Co., Montreal, have placed an order with The Smart-Turner Machine Co., Limited, Hamilton, for a Duplex Pump.

W. P. McNeil & Co., New Glasgow, N.S., have recently ordered from Robb Engineering Co. a 150 H.P. Robb-Mumford boiler with steel case.

The Montreal General Hospital have placed an order with the Robb Engineering Co. for two (2) 150 H.P. 72″ x 20′ return tubular boilers.

Messrs. West & Peachy, Simcoe, have ordered a side suction Centrifugal Pump from The Smart-Turner Machine Co., Limited Hamilton, Ont.

The Dominion Heating & Ventilating Co., Hespeler, Ont., have ordered a Duplex Steam Pump from The Smart-Turner Machine Co., Limited, Hamilton.

Messrs. Donaldson & Wark, Hamilton, have ordered a side suction Centrifugal Pump from The Smart-Turner Machine Co., Limited, of the same place.

The Smart-Turner Machine Co., Limited, Hamilton, are supplying the Brompton Pulp & Paper Co., East Angus, P.Q., with one of their Duplex Pumps.

The Robb Engineering Works, Amherst, N.S., have ordered two Standard Duplex Pumps from The Smart-Turner Machine Co., Limited, Hamilton, Ont.

The Ontario Iron & Steel Co., Welland, Ont., are installing 5 Bracket Jib Cranes in their works, being supplied by The Smart-Turner Machine Co., Limited, Hamilton, Ont.

Chambers Electric Co., Truro, N.S., have ordered from Robb Engineering Co. one (1) 10″ & 16″ x 8″ Robb-Armstrong Vertical Cross Compound Engine arranged for direct conection to 75 K.W. generator.

The Canadian Rand Drill Co., Sherbrooke, P.Q., have ordered from Robb Engineering Co. one (1) 11″ & 16″ x 14″ Robb-Armstrong Tandem Compound Engine arranged for direct connection to 75 K.W. generator.

Even in these days of industrial growth, the history of the Metal Shingle & Siding Co., of Preston, Ont., is remarkable. From a small beginning, about ten years ago, they have grown rapidly, until their goods are now sold in every part of Canada, and in many foreign countries as well.

Edmonton, Alta., is to have one of the largest brick manufacturing industries in the West, known as Pressed Bricks, Limited. This is to be a Sand-Lime Brick indus-

TO BENEFIT ADVERTISERS

Each month *The News* has published a comparison of the amount of advertising space used over a corresponding period of the previous year.

THESE ARE THE FIGURES FOR THE PAST EIGHT MONTHS

	1905		1906		INCREASE
October	323,395	lines	382,864	lines	59,469
November	357,703	"	436,113	"	78,410
December	390,284	"	454 167	"	63,883
	1906		1907		
January	288,502	"	366,592	"	78,090
February	284,894	"	375,109	"	90,215
March	371,875	"	439,573	"	67,698
April	347,100	"	415,650	"	68,550
May	358,025	"	427,025	"	69,000
	2,721,778	"	3,297,093	"	575,315
					LINES INCREASE

Our object in doing this is not to show that the advertising patronage of *The News* is increasing over its competitors, but to indicate to Ontario advertisers that

The News is a Paying Investment

to the advertiser.

The above increase is the strongest proof of this that could possibly be given.

It proves that *News* readers are buyers.

It proves that advertisers have been convinced of the truth of this or they would not increase their advertising space.

It proves that **new advertisers** find it advantageous to use space in *The News* because they can get it at **a flat rate of 4 cents per line**—whether they want to use much or little space. No heavy contract is required which must be taken to get a low rate, and which must be used whether it pays or not.

It proves that *The News* is steadily growing in the confidence and good-will of the public, which is the most important feature of all in the success of a daily newspaper.

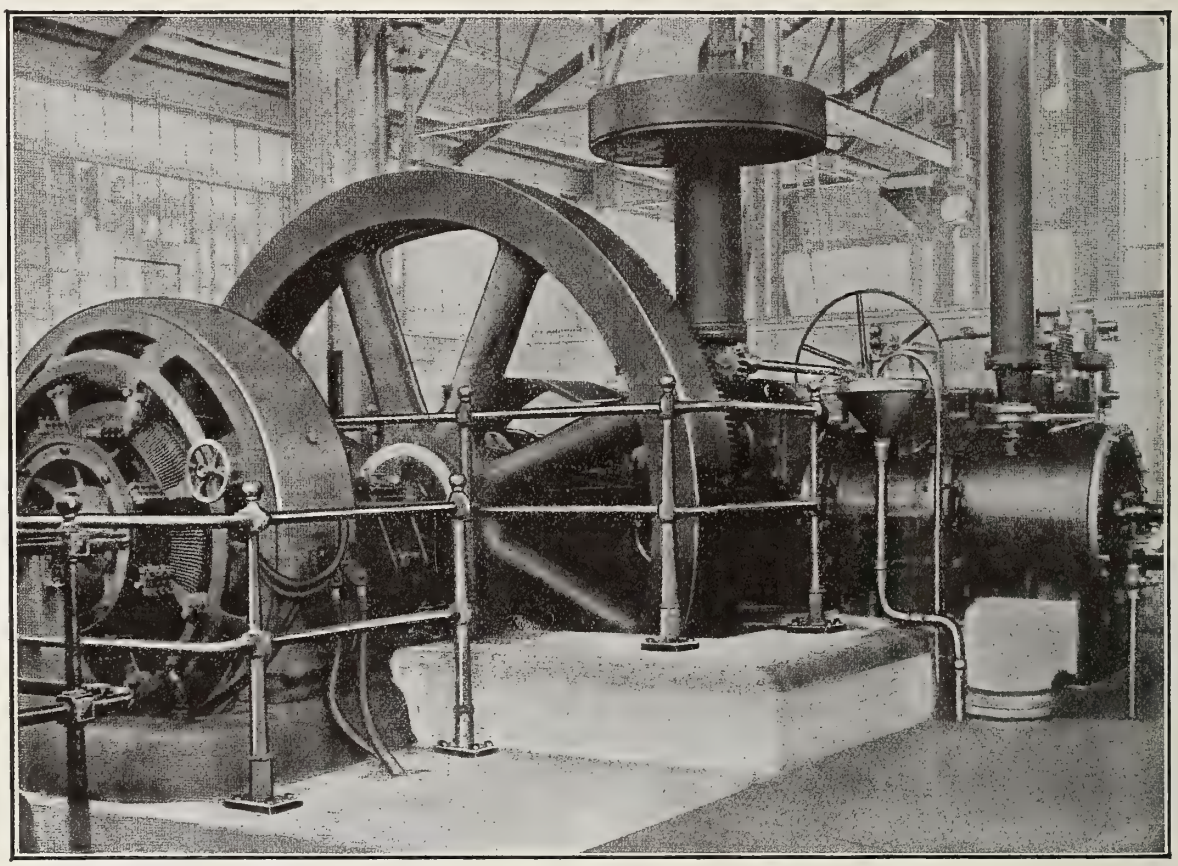
With these facts and figures before you, are you doing justice to your business by using proper space in

THE NEWS?

"PREMIER" GAS ENGINES

FOR USE WITH

Producer Gas, Suction Gas, Blast Furnace Gas, Town Gas, Oil Gas, Coke Oven Gas.



100 HORSE-POWER "PREMIER" GAS ENGINE

Simple, Reliable, Quiet, Steady, Economical. Small Repairs. Used with C. G. E. Electric Generators and Motors, form an ideal plant.

CANADA FOUNDRY COMPANY

LIMITED

Head Office and Works: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland.

try of 40,000 capacity daily. The complete outfit is to be manufactured and installed by, and under the supervision of, A. Berg & Sons, Toronto.

Somerville, Limited, Toronto, have recently ordered from Robb Engineering Co.:

1 200 H.P. 16″ x 30″ Robb-Armstrong Corliss engine arranged for direct connection to an electric generator.
2 100 H.P. 67″ x 16′ Return Tubular boilers.
1 200 H.P. feed water heater.
1 5½″ x 3½″ x 5 Duplex boiler feed pump.

At the May meeting of the Winnipeg City Council the special committee on civic accounting received the report of the experts appointed to reorganize this department, and on their recommendation it was decided to award the contract for supplies to the Rolla L. Crain Co., Limited, of Ottawa, their goods being, everything considered, the best adapted to the city's requirements. Winnipeg intends to instal the Loose-Leaf System through all the civic offices in the near future. This is a move in the right direction, and they are to be congratulated on securing a system that is unsurpassed either in Canada or the States.

At the close of last year, their business in Eastern Canada having assumed large proportions, it was decided to open a branch factory in Montreal. The directors were fortunate in securing the large building at the corner of St. Catherine St. and De Lorimier Ave., known as the old C. P. R. shops, and work was immediately begun, to fit up the building for its new purpose. A large warehouse was erected with "Acorn Quality" Corrugated Sheets, and other extensive improvements made to the property.

The work of installing machinery has now been completed, and the plant is in full running order. The Montreal factory has a large capacity, and, with the increased production, the Company are now able to make prompt shipments to their customers everywhere. The manager of the Montreal branch is Mr. A. K. Cameron, whose successful experience on the road in Ontario marked him out for the promotion.

Within the past couple of weeks, the Metal Shingle & Siding Co. have also opened a branch office and warehouse at 100 Esplanade East, Toronto, where a stock of all their principal lines will be carried. L. B. Beath, who formerly represented the Company in New Ontario, has assumed management of the Toronto branch.

The Robb Engineering Co. have recently received the following orders:

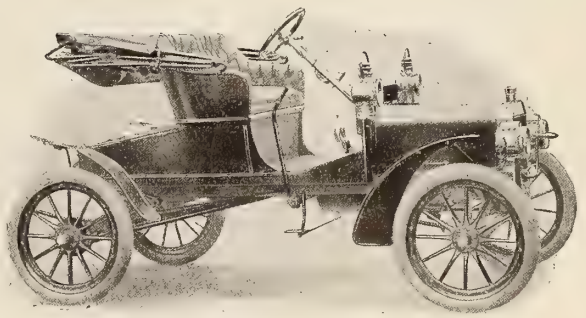
1 80 H.P. Robb-Armstrong engine for N. & M. Smith, Halifax, N.S.
1 125 H.P. Robb-Armstrong engine for Columbia River Lumber Co., Golden, B.C.
1 80 H.P. Robb-Armstrong engine arranged for direct connection to 50 K.W. generator for Temiskaming and Northern Ontario Railway.
1 80 H.P. Robb-Armstrong engine from Canadian General Electric Co. for Canadian Pacific Railway.
1 100 H.P. Robb-Armstrong engine for Canadian Westinghouse Co., Hamilton, Ont.

An Ottawa company will establish a brick-making plant at Seeley's Bay on the Rideau River. Mr. H. N. Bate, of Ottawa, is President, and A. E. Honeywell, of Ottawa, is Secretary of the company. The capital is fixed at $100,000. The company will make building brick, fancy earth tile, sewer pipe, paving brick, etc. The name of the company is the Perfect Brick and Tile Company.

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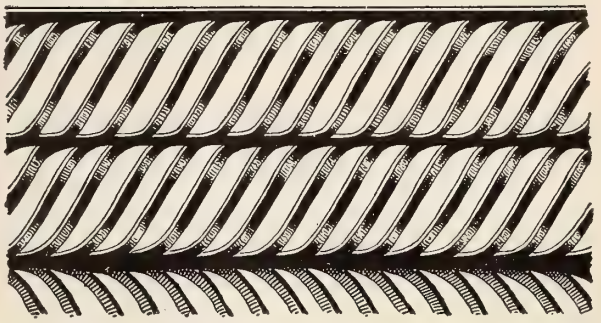
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Alternating currents are at present used preferably in electric plants, both for power and lighting purposes, and electric energy is usually distributed in Europe to consumers in this kind of current, though for certain special purposes a conversion to continuous current is found desirable. As the devices constructed for this purposes are far from being satisfactory, endeavors have been made from time to time to design an electrolytic transformer based on the principle that in an electrolytic trough comprising an aluminium and a lead electrode. The current will be allowed to pass only in case the aluminium forms the cathode or negative electrode, while it is arrested in the opposite case by the layer of aluminium oxide formed by the current. A rather promising apparatus embodying the principle was demonstrated a short time ago by its inventor, O. de Faria, before the French Physical Society. The drawbacks inherent in all previous apparatus of the same kind, viz., polarization of the electrodes and excessive heating of the electrolyte, are eliminated by a convenient choice of the electrodes and liquid. Furthermore, an automatical circulation of the electrolyte is obtained by means of convection currents in the liquid mass. Sodium phosphate is used as the electrolyte, and pure commercial aluminium and antimony-lead as electrode mass. Owing to the circulation of the liquid, the temperature cannot exceed certain limits, while any polarization is entirely done away with. The efficiency of the apparatus varies between sixty-five and seventy-five per cent. in watts. The main uses of the apparatus are the charging of accumulators and operation of induction coils, arc lamps, mercury lamps, continuous current motors, electro-plating plants, etc.

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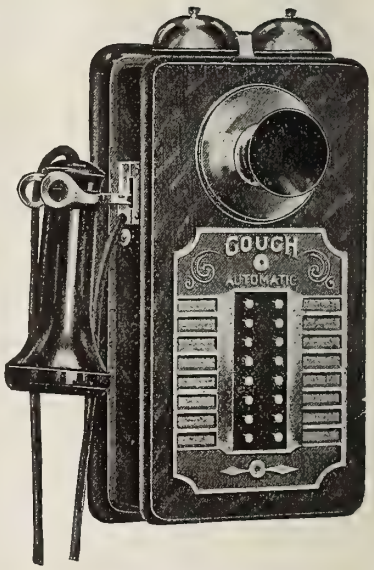
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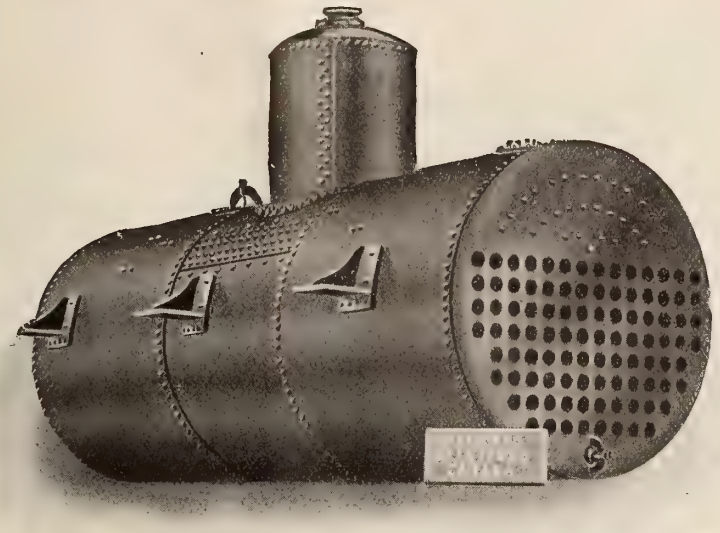


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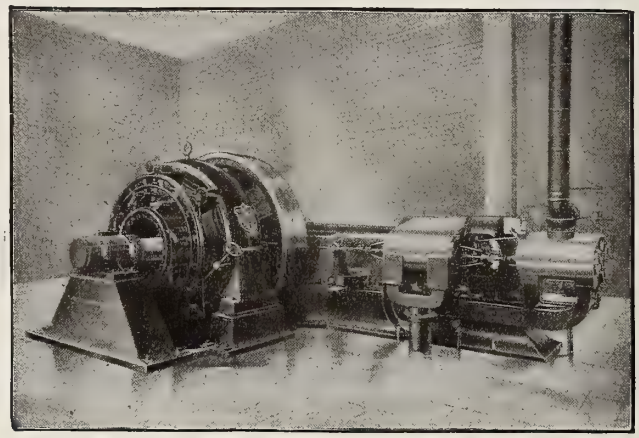
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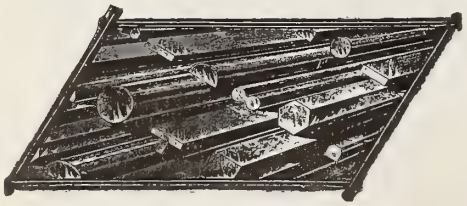
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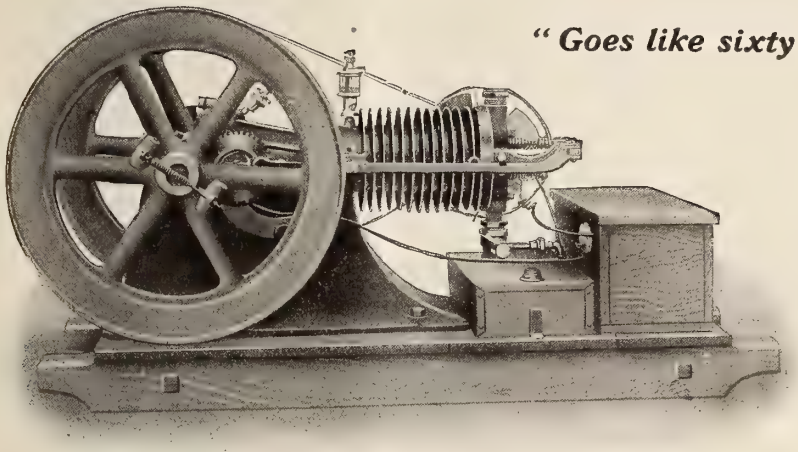
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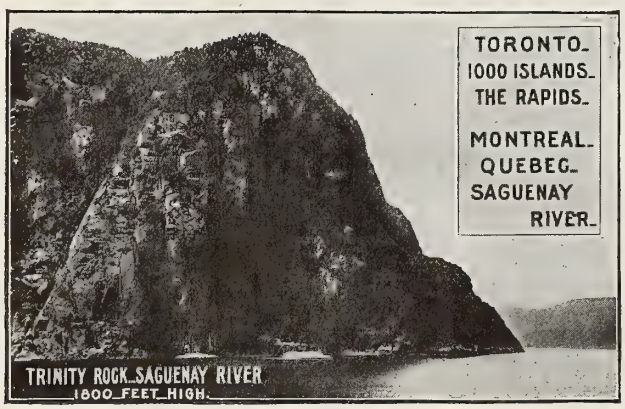
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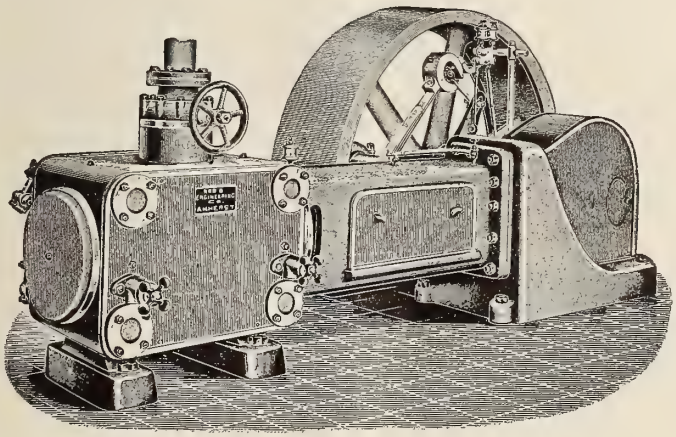
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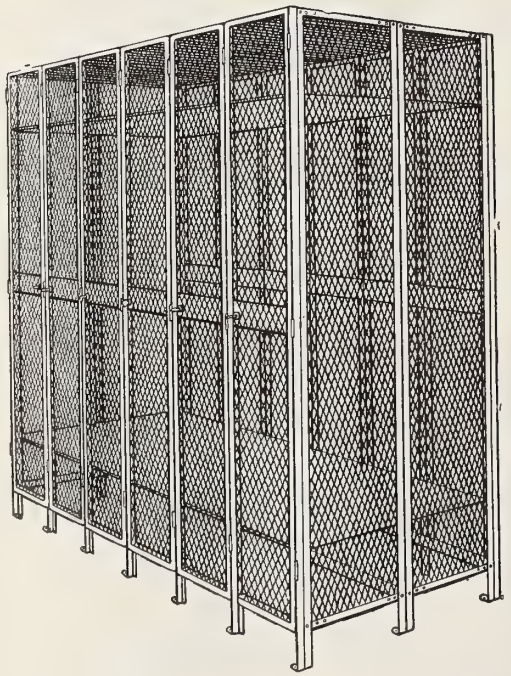
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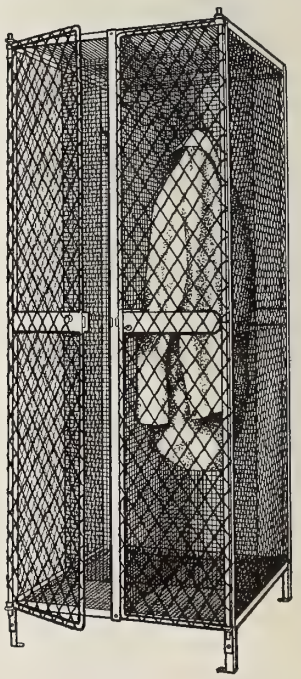
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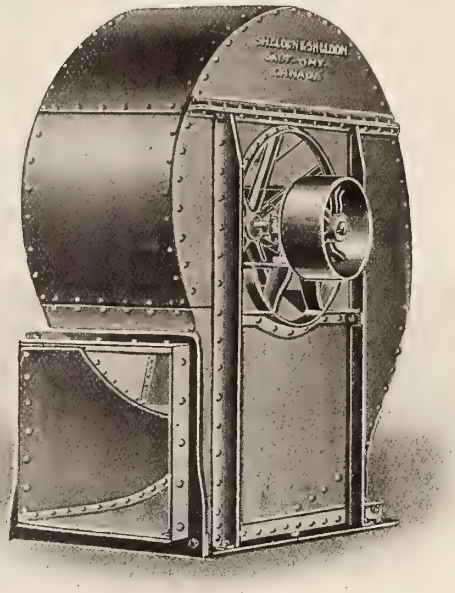
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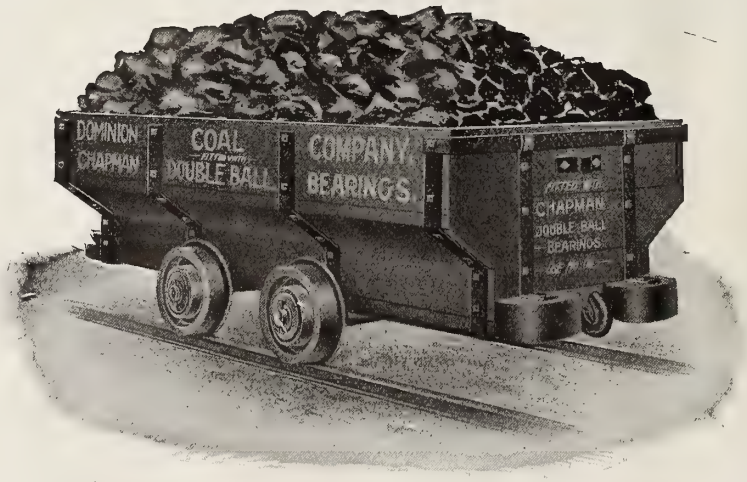
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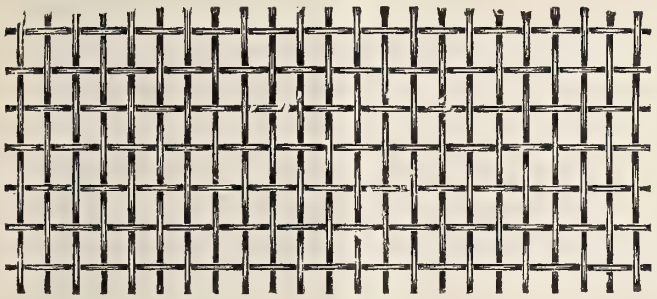
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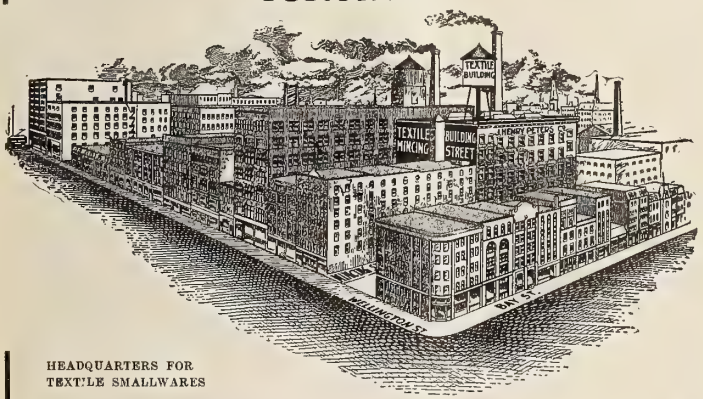
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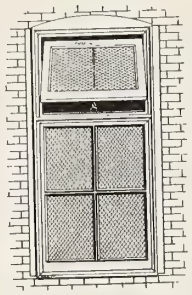


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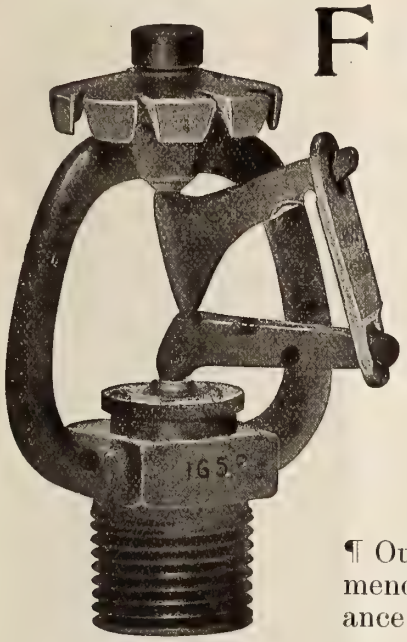
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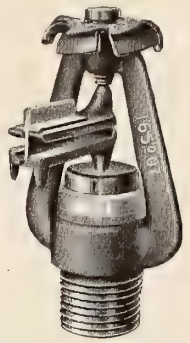
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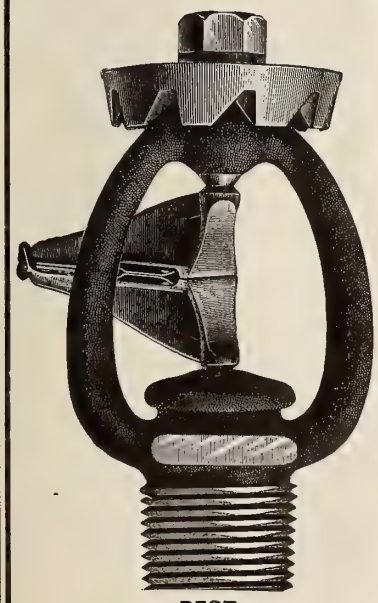
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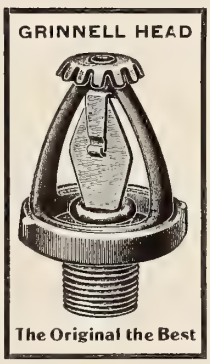
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THE EVANS VACUUM CAP is a practical invention constructed on scientific and hygienic principles by the simple means of which a free and normal circulation is restored throughout the scalp. The minute blood vessels are gently stimulated to activity, thus allowing the food supply, which can only be derived from the blood, to be carried to the hair roots, the effects of which are quickly seen in a healthy, vigorous growth of hair. There is no rubbing, and as no drugs or chemicals of whatsoever kind are employed, there is nothing to cause irritation. It is only necessary to wear the Cap three or four minutes daily.

60 DAYS' FREE TRIAL

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The eminent Dr. I. N. LOVE, in his address to the Medical Board on the subject of Alopæcia (loss of hair), stated **that if a means could be devised to bring nutrition to the hair follicles** (hair roots) **without resorting to any irritating process, the problem of hair growth would be solved. Later on, when the EVANS VACUUM CAP was submitted to him for inspection, he remarked that the Cap would fulfil and confirm in practice the observations he had previously made before the Medical Board.**

Dr. W. MOORE, referring to the invention, says that **the principle upon which the EVANS VACUUM CAP is founded is absolutely correct and indisputable.**

An illustrated and descriptive book of the Evans Vacuum Cap will be sent, post free, on application.

The Secretary, Evans Vacuum Cap Co., Limited

REGENT HOUSE, REGENT STREET, LONDON, W.

Executive Council

JUNE MEETING.

THE regular monthly meeting of the Executive Council was held in the Board Room of the Traders' Bank on Thursday, June 20th, at 2 p.m. The meeting opened with the Hon. J. D. Rolland, Vice-President, in the chair, who afterwards retired on the arrival of the President, Mr. Harry Cockshutt.

Other members present were : Messrs. Geo. J. Armstrong, St. Catharines ; G. Frank Beer, Toronto ; Henry Bertram, Dundas ; P. H. Burton, Toronto ; J. C. Casavant, St. Hyacinthe; R. J. Copeland, Toronto; P. W. Ellis, Toronto; T. H. Estabrooks, St. John, N.B.; Thos. Findley, Toronto ; John Firstbrook, Toronto ; H. W. Fleury, Aurora ; Ed. Freyseng, Toronto; Geo. D. Forbes, Hespeler ; W. M. Gartshore, London ; Geo. Gillies, Toronto ; S. Harris, Toronto ; S. R. Hart, Toronto ; J. Hewton, Kingston ; J. H. Housser, Toronto ; Geo. McLagan, Stratford ; R. McLaughlin, Oshawa ; J. B. MacLean, Toronto ; Chas. S. Meek, Toronto ; J. P. Murray, Toronto ; J. A. Publow, Hamilton ; Wm. Robins, Walkerville; Thos. Roden, Toronto ; A. S. Rogers, Toronto ; Frank A. Rolph, Toronto ; W. B. Tindall, Toronto ; J. O. Thorn, Toronto; S. M. Wickett, Toronto; Dan. Wilson, Collingwood; W. H. Wyman, Montreal.

Minutes of the meeting, as published in INDUSTRIAL CANADA, were taken as read.

Letters of regret were received from the following members of the Council, who were unable to be present : Messrs. W. Cauldwell, Robt. Munro, J. J. McGill, C. C. Ballantyne, S. W. Ewing, Jas. Davidson, Louis Simpson, R. J. Whyte, Geo. E. Amyot, D. J. Fraser, T. F. Matthews, W. H. Rowley, H. C. MacLean, E. G. Henderson, W. W. Doran and Geo. Booth.

In the absence of the President, the Secretary reported that since the last meeting of the Council a visit had been paid to the Quebec Branch of the Association, and a good deal of information supplied them regarding the various lines of work in which the Association was interesting itself. It was the intention of the President and himself to visit Winnipeg during the following week, which would terminate the series of visits which they had been instructed to make.

He also reported having attended the Convention of the National Association of Manufacturers in New York, where he had gained a number of ideas which, he thought, could be adopted by the Association with advantage. Some of these were referred to in the reports of the Commercial Intelligence Committee and the Reception and Membership Committee.

TREASURER.

In the absence of Mr. Booth, the Secretary read the Treasurer's report, which showed a balance on hand at the end of ten months of $11,564.34, after deducting $5,000 for investment purposes. This report was received with satisfaction.

FINANCE.

The report of the Finance Committee was read by the Chairman, Mr. W. B. Tindall. It recommended for payment the usual monthly accounts, amounting in all to $1,176.93.

Referring to a recommendation made in the report of the Insurance Committee with regard to the appropriation of Association funds for a special purpose that would afterwards be explained more in detail, it stated that consideration had already been given this recommendation, and that the Committee heartily endorsed it.

The report recommended the re-engagement of Mr. Dakers Cameron as Secretary of the Montreal Branch for another year, and also recommended that the Secretary be authorized to procure photographs of all former Presidents of the Association and to have same suitably framed and hung in the Committee room.

"INDUSTRIAL CANADA."

The Chairman, Mr. Geo. Brigden, read the report of the INDUSTRIAL CANADA Committee. It showed a cash surplus for ten months, ending May, of $2,541.54, and an estimated revenue surplus for eleven months of $3,300.14. It also reported that the contract for printing INDUSTRIAL CANADA for the ensuing twelve months had been awarded to the Methodist Book Room. The adoption of the report, moved by Mr. Brigden, seconded by Mr. Wickett, was carried.

Col. MacLean called attention to an editorial in the last issue of INDUSTRIAL CANADA, dealing with the postage on United States periodicals, stating that he thought the Associaion was not yet prepared to take the decided stand indicated by this editorial, and that a recommendation should be made to the Government with a view to admitting technical magazines and high-class trade periodicals on the same terms as before. He, therefore, moved, seconded by Mr. Murray, that this be done, but afterwards withdrew his motion, substituting another one to the effect that the matter be referred to the Commercial Intelligence Committee.

A general discussion followed, the tone of which seemed to favor the action of the Post Office Department. A vote having been taken, the motion was declared lost.

COMMERCIAL INTELLIGENCE.

The report of the Commercial Intelligence Committee was read by Mr. Jas. P. Murray, as follows :

Your Commercial Intelligence Committee begs to submit the following report of its regular monthly meeting, held on Tuesday last :

Buenos Ayres Swindle.

Letters received from members as a result of the circular sent out warning them of the swindle that was being attempted by a certain firm from Buenos Ayres, indicate that the prompt action taken by your Committee was heartily appreciated. It is evident from these letters that operations were being conducted on a much larger scale than were originally supposed, and there is little doubt that a number of firms would have suffered loss but for this timely warning.

Standard Sizes for Trade Catalogues.

Further correspondence with organizations that have interested themselves in the above question seems to indicate that the proposition is impracticable. All who have tried it have finally had to drop it, and your Committee now proposes to do the same.

Franco-Canadian Treaty.

For some months your Committee has been investigating the advisability of taking steps to extend the scope of the Franco-Canadian treaty of 1893, so as to secure the benefits of the French minimum tariff for a much larger number of Canadian articles than are at present entitled to it. A letter has now been received from the Canadian section of the British Chamber of Commerce, Paris, indicating the nature of the *quid pro quo* that the French Government would likely require. As this *quid pro quo* would include concessions on a number of articles that are being made in Canada by mem-

bers of the Association, and as it would further tend to divert a certain amount of trade from the United Kingdom to France, your Committee feel that the matter is one which more properly falls under the jurisdiction of the Tariff Committee. In referring it to this Committee, we desire to point out the need for prompt and careful investigation in order that the Association may be in a position to express its views on the subject should legislation along this line be introduced at the next session of Parliament.

Mr. Donly's Visit.

Mr. A. W. Donly, Canadian Commercial Agent in Mexico, is expected to visit Canada during the summer, and the Committee will endeavor to arrange for a meeting at which he be given an opportunity of addressing the Association on trade possibilities in that country.

Reports on Doubtful Compromises.

At the suggestion of one of our Montreal members your Committee is considering the advisability of providing some means whereby the Association will be in a position to report on assignments or compromises of a doubtful nature. Work of this kind is at present being done by the solicitors of the Furniture Section, with results that are quite beneficial to the members of that section. It is thought that if such a service could be extended so as to include reports on all classes of houses it would greatly increase the strength and usefulness of the Association. A sub-committee has been appointed to bring in a report at the next meeting.

Translations, Commercial Reports, Collection of Accounts, Etc.

In a report presented by the Secretary on certain observations he had made when visiting the office of the National Association of Manufacturers in New York, considerable emphasis was laid on the facilities provided by that organization for translating the foreign correspondence of members, for procuring commercial and financial reports on foreign houses, and for collecting overdue accounts. Large staffs are constantly employed in all these departments. The service up to a certain extent is given to members free of charge, and is very generally taken advantage of. While our Association is prepared to do translating and to procure commercial reports, its facilities are taken advantage of to such a limited extent that those departments are practically a dead letter. It has long been felt that better arrangements should be made, particularly for obtaining credit reports, as the development of a successful export trade hinges very largely on the promptness and efficiency of this service. A special sub-committee has been appointed to investigate this whole question thoroughly. Their report will be submitted at the next meeting, and before we resign office we hope to be able to make recommendations looking to the reorganization of these departments along lines which will make them much more valuable to members of the Association without materially increasing their cost of administration.

The adoption of the report, moved by Mr. Murray, seconded by Mr. Burton, was carried.

PARLIAMENTARY.

The report of the Parliamentary Committee was presented by the Chairman, Mr. A. S. Rogers. It read in part as follows :

The regular monthly meeting of the Parliamentary Committee was held on Monday last, with an attendance of five. Among the matters that received consideration were the following :

Civil Service Reform.

A communication was read from the Toronto Board of Trade requesting the Association to support its resolution in favor of placing the civil services, both Dominion and Provincial, on a non-political basis. The Secretary was instructed to write the Board of Trade expressing approval of the principle, and stating that the Association would be glad to co-operate with the Board in the preparation of a memorial to be presented to the Civil Service Commission on their visit to Toronto.

Ontario Labor Bureau.

Since the last meeting of the Executive circulars have been issued by the Ontario Labor Bureau requesting manufacturers to supply certain information relative to their capital, employes, expenses, and output, for the purpose of compiling the usual statistics contained in the annual report of that department. The recommendations made by the committee with respect to the questions to be embodied in this circular have been ignored, and we would recommend, therefore, that the Secretary be authorized to inform Ontario members at once by means of a circular that it is not compulsory to supply the bureau with the details asked for.

The report of the department recently to hand has been very severely criticized in a number of quarters, and in the opinion of your Committee much of the criticism is justified. We hope, however, to make some definite recommendations on this subject next month, after we have had an opportunity of looking more carefully into the matter.

Alien Labor Law.

The attention of the Committee has been called to the fact that whereas the Alien Labor Law of Canada permits the United States contractor to bring his skilled help with him into this country, the Alien Labor Law of the United States denies the Canadian contractor the same privilege. While this is an injustice which the Committee would like to see removed, it is not deemed prudent at the present time to press for a retaliatory measure, as it is not thought such a step would be in the best interests of employers at large.

RAILWAY AND TRANSPORTATION.

Mr. J. H. Housser presented the report of the Railway and Transportation Committee, which read in part as follows :

The regular monthly meeting of the Railway and Transportation Committee was held in the Association offices on Friday, June 14th, 1907, when the following subjects were discussed :

International and Readjustment of Rates.

Your Committee begs to report that several meetings have been held since our last report, and a final conference took place in Toronto on May 23rd, at which the railways presented an outline of group tariff of east-bound rates covering the territory, Windsor to Montreal. Rates from parallel and connecting branch lines of the Grand Trunk and Canadian Pacific Railways are to be shown on a basis corresponding to the main line. Your Committee fully expects to report finally on this important matter at the July meeting.

Classification No. 13.

This classification has been thoroughly checked by the department, and with a few exceptions has been agreed upon. Considerable discussion took place in regard to Rule 7 (covering owner's risk), and as a result the following resolution is submitted for approval :

After considering classification, as prepared by the rail-

ways, the Committee has no objections to register, except with regard to (rule 7) goods carried at owner's risk.

(1) It is observed that this rule is not as reported to the Board at hearing in Montreal, December 14th, 1905, but is considerably modified in favor of the railways.

(2) The railway clauses place upon the shippers the onus of proving negligence on the part of the railway or its servants, an impossible task, as all evidence on the point is in the possession of the railways.

(3) Before adopting Rule 7, as prepared by the railways, the Board of Railway Commissioners should first of all determine the extent to which they propose to allow railway companies to restrict their liability for the safe carriage of goods classified to be taken at owner's risk. Independent of any negotiations which may have been conducted between the shippers and carriers, we believe this duty rests upon the Board, and any negotiations must be made subject to their decision. We would respectfully refer the Board to sections 214 and 275, sub-sections 2 and 3, of the Railway Act, 1903, now sections 284 and 340, sub-sections 2 and 3, R.S.C., 1906.

Bills of Lading.

A communication has been received from the Board of Railway Commissioners to the effect that consideration of the draft of bill of lading submitted by the railway companies had been postponed by the Board until after the 1st of August upon the application of the Canadian Bankers' Association, the Montreal Board of Trade, the Montreal Corn Exchange, and the Winnipeg Jobbers' Association. A definite date for the hearing of the parties interested in the matter has not yet been finally dealt with by the Board, but it will be, subsequent to the 1st of August next.

Express Rates.

The department reported that the Board of Railway Commissioners advised that it was the intention of that body to grant an extension of time for approval of tariffs and classification until the 1st of November next.

Reciprocal Demurrage.

The Board of Railway Commissioners state they are leaving consideration of this matter until they are fully advised as to the condition of the railway companies in regard to equipment, and have final reports of their operating experts as to what measures should be adopted.

A communication was received from the Secretary of the Montreal Corn Exchange asking this Association to join a deputation to wait upon the Board of Railway Commissioners in regard to reciprocal demurrage. Your Committee recommends that the manager of the department, or the Secretary of the Association be instructed to join this deputation.

Placing Advertisements on Freight Cars.

This matter has been the subject of considerable correspondence with the principal railways, and they advised that their instructions are that all advertising matter must be removed from their equipment, in accordance with a rule adopted by the American Railway Association, which prohibits placing of advertising matter on freight cars.

Tariff of Wharfage Rates Adopted by Montreal Harbor Commissioners.

The department reported the receipt of tariff of switching rates adopted by the Harbor Commissioners of Montreal, but as a reply to a communication to the Board of Railway Commissioners in respect to this matter had not been received, no action was taken.

Import Rates.

Complaints have been received in regard to import rates, but as your Committee had already dealt with complaints of a similar nature, and as it was found that there was a confliction of interests, it was decided that no action could be taken.

The adoption of the report, moved by Mr. Housser, seconded by Mr. Harris, was carried.

INSURANCE.

Mr. Heaton read the report of the Insurance Committee.

The first part of the report dealt with the results of the fire insurance business of the country, and to obviate repetition it need not be reprinted here. The figures will be found in a special article at the front of the paper.

Mutual Fire Insurance.

The Committee have thought it wise to recite these figures, because they add a reason, not heretofore considered, yet of great value and strength that must emphasize the desirability of furthering our own mutual fire insurance companies, and to press them to successful organization with as much energy as possible and within the shortest period.

The plan adopted by the Committee and the provisional directors of the two companies now under organization, and approved of by the Council, were communicated to all members of the Association on May 23rd. On the 1st of June, Mr. B. L. Anderson, under the arrangement sanctioned at the last meeting, started on the work of interviewing the members, and the manager of the department also has at convenient times taken up the same work ; there has been received up to the 17th inst., through direct responses by mail, and as a result of personal interviews, applications on 192 separate and distinct risks aggregating $945,958 of insurance in each of the two companies, a result far exceeding the most sanguine anticipations of the Committee.

Both Mr. Heaton and Mr. Anderson report that in their canvass they have met with a general and most cordial reception of the Committee's plans, and the results we are able to record afford strong evidence of this. We are, moreover, of the opinion that the result of the past three weeks' work may be taken as a fair indication of the reception that will be met with in the extended canvass that will now ensue, and after giving the whole subject their most careful attention the Committee believe the best interests of the members in this matter will be served by an effort to cover the entire membership in a much shorter time than will be possible under subsisting circumstances. They, therefore, request permission of the Council to use Mr. Dakers Cameron, the Montreal Secretary, in a canvass of the Province of Quebec, in so far as his other duties will permit, and that they be empowered to obtain such further temporary assistance as may be necessary. For this purpose they have asked the Finance Committee to arrange that a sum not exceeding one thousand dollars be placed at their disposal, as will more fully appear in the report of that Committee.

On motion of Mr. Tindall, seconded by Mr. Burton, the report was adopted.

RECEPTION AND MEMBERSHIP.

Mr. Chas. S. Meek, the Chairman, read the report of this Committee. It recommended for acceptance seventeen applications for membership, the names of which appear in another column.

The adoption of the report, moved by Mr. Meek, seconded by Mr. Ellis was carried.

BRITISH OFFICE.

The Secretary read the report of the British Office Committee. It contained a statistical analysis of the business transacted by the department to date, which was regarded as quite satisfactory. It further recommended that to ensure parties engaged on behalf of members going through to destination, the London agent be instructed to collect baggage checks in every instance, and to mail them direct to the employer.

The last two paragraphs of the report read as follows :

Scarcity of Labor Resolution.

In accordance with permission granted at the last meeting of the Executive Committee, a letter was addressed to the Minister of the Interior, expressing the hope that he would instruct the Canadian immigration agents in the United Kingdom to recognize the London office of the Association by referring applications for work in the various skilled trades to our office for information. The minister has replied stating that there are many difficulties in the way of such a step, and that he can give no assurance of a change of policy along the line we have pointed out. He refers us to the instructions issued to booking agents, under date of November 15th last, as representing the fixed policy of the Government on the immigration question. One of the clauses in these instructions states that "the demand in Canada is for people to occupy the as yet vacant lands of the country, to aid in the cultivation of those already occupied, and also to assist in providing additional transportation facilities. This it is which justifies the Government in assuming the expenses of immigration effort. To go beyond the attempt to meet these requirements would be to use the money of certain classes of Canadian taxpayers for the purpose of securing competitors against them in their several callings, for which they would naturally hold the Government to account." The Committee is of the opinion that such a concession to the selfish demands of organized labor is as weak as it is short-sighted, and that the Association should not let the matter drop until it has brought every possible pressure to bear on the Government to change its policy.

Situations Wanted.

Numerous applications are received through Mr. Leopold from time to time, from parties in the Old Country, who are anxious to come to Canada to work, but for whom there are no openings among the list of formal applications sent in by members. These, your Committee think, ought to be published monthly in INDUSTRIAL CANADA. Particulars might be briefly stated in each case without, however, mentioning the name and address of party inquiring. This information could afterwards be supplied interested employers on application. Such a step would not only be appreciated by prospective immigrants and by members, but would be in line with the general policy of the Association to encourage the importation of skilled mechanics.

The adoption of the report, moved by Col. Gartshore, seconded by Mr. McLaughlin, was carried.

BRANCHES.

On behalf of the members in St. John, N.B., Mr. T. H. Estabrooks said a few words on the importance of developing our ocean ports. The people of St. John had spent over one million dollars of their own money in improving their harbor. They believed that by so doing they had demonstrated the possibilities of the harbor. The benefits were shared by the country at large, and the cost of further improvements ought, therefore, to be borne by the Dominion. Mr. Rolland, who was then in the chair, assured Mr. Estabrooks that any representations the St. John members might have to make to the Executive on this subject would be carefully considered.

The report of the Montreal Branch was read by the Secretary, that of the Toronto Branch by Mr. John Firstbrook, both of which will be found elsewhere.

NOTICE OF MOTION.

The Secretary read a communication from Mr. Robins, of Walkerville, giving notice that at the next meeting of the Executive he would move that the Committee reports for presentation to the Executive Council be printed and distributed to the members before the meeting.

There being no further business, the meeting then adjourned.

TORONTO BRANCH.

The last meeting of the Toronto Branch Executive for the present branch year was the best yet in point of numbers attending. The principal matters discussed were :

Female Labor.

The Committee on this subject reported that the Salvation Army would be very glad to go into a scheme with the Association to bring out a large number of girls to work in various manufacturing centres. They propose that the manufacturers pay passage money over, this to be loaned to the girls, the Army to make all the collections. They guarantee that the number of defaulters will not exceed 4 per cent.

Your Committee will probably arrange a conference of interested manufacturers who employ large number of girls to go into this matter in detail with the Army officials in the near future. There is every reason to believe that a satisfactory arrangement can be made.

Bureau of Labor.

Several complaints having been received against the manufacturers' schedule of questions recently sent out by the Ontario Bureau of Labor, on the ground that the questions were impertinent and unfair to employers, the Branch decided to ask the Parliamentary Committee to protest to the Government against the nature of the questions asked. This matter has already been dealt with in the Parliamentary Committee report.

Union Label.

The Board of Education having recently decided to have the Union Label placed on some printing done for them, the Branch determined to enter a protest to the Board condemning their action as being a restriction on freedom of contract, and opposed to the best interests of the community.

Metallic Roofing Co.

After hearing Mr. J. O. Thorn, of the Metallic Roofing Co., review the history of that company's case against Local No. 30 of the Amalgamated Sheet Metal Workers' Union, the Branch was of the opinion that this company were waging a fight in the interests of all manufacturers, as well as of themselves, and felt, therefore, that the Association should do something to aid the company in the further conduct of their case, which promises to be very expensive.

A resolution recommending that the Executive Council hear Mr. Tilley, the lawyer who has conducted this case throughout, was unanimously adopted, and the feeling of the meeting was strongly in favor of some pecuniary aid being granted for the conduct of this case. This matter has already

been dealt with in the report of the Parliamentary Committee.

Convention Arrangements.

The programme for convention week, as far as the Toronto Branch, who are the hosts this year is concerned, is now complete, and will be announced next month.

Annual Meeting.

The annual meeting of the Toronto Branch will be held in the Bank Board Room, third floor, Traders' Bank Building, Thursday, July 11th, at 2 p.m.

MONTREAL BRANCH.

At the regular monthly meeting of the Montreal Executive Committee, on June 13th, a complaint was made regarding the vexatious delays that have existed for some months whereby manufacturers are advised of the arrival of shipments, but after paying freight and duty, find that the cars are not unloaded and the goods cannot be obtained for some weeks. It was suggested that efforts should be made to prevent the railways from advising consignees of the arrival of goods until these goods could be obtained. This matter was communicated to the Railways and Transportation Committee. A large number of purely local matters were taken up.

The Branch has extended its co-operation to the Dominion Builders and Contractors Exhibition, to be held in the Victoria Rink, August 6th to 9th. This exhibition is being largely promoted and supported by members of this Association.

A special communication was laid before the Committee in regard to prospects for trade with the Bahamas, which will probably be considered by some of the members.

The annual meeting of the Montreal Branch will take place in the reading room of the Montreal Board of Trade, on Thursday, June 27th. The annual nomination and election of officers is now taking place.

ANNUAL MEETING IN MONTREAL.

The annual meeting of the Montreal Branch took place on June 27th. The President, in his address, discussed the leading subjects which had claimed the attention of the Branch, and outlined some fields of activity for the Association in the future. The report of the Executive Committee showed that that body had been active and attentive to the best interests of the manufacturers. A most successful year rewarded the efforts of the officers and committees. Mr. S. W. Ewing was elected Chairman for the coming year by acclamation, and Mr. S. S. Boxer, Vice-Chairman, also by acclamation.

NEW MEMBERS.

CAMPBELLFORD, ONT.

The Northumberland Paper and Electric Co., Limited.—Straw and filled board and building papers.

KINGSTON, ONT.

Ontario Powder Company, Limited.—(C. A. Macpherson, 2nd member.)

MONTREAL, QUE.

The Mount Royal Spinning Co., Limited.—Cotton fabrics.

NIAGARA FALLS, ONT.

McGlashan, Clarke Co., Limited.—Cutlery, electro-plate and solid nickel silver flatware.

QUEBEC, QUE.

Dominion Shirt Company.—Shirts.

J. A. Gagnon & Freres.—Biscuits, jellies, etc.

TORONTO.

Acme Supply Company.—Pyrographic goods and wood workers.

E. P. Brownell & Co.—Confectionery.

E. R. Burns' Saw Company.—Saws of all kinds, handles, etc.

Crown Manufacturing Co.—Grocers' sundries and confectionery.

Walter Dean.—Canoes, boats, launches, toboggans, hockey sticks, etc.

Dominion Sewer Pipe Co.—Sewer pipe of all kinds.

Moss Chemical Mfg. Company.—Ammonia.

The Photo-Engravers, Limited.—Photo-engravings on wood, zinc and copper.

Tait & Company.—Interior woodwork.

TORONTO JUNCTION, ONT.

Dominion Carriage Co., Limited.—Carriages.

WAWANESA, MAN.

The Wawanesa Wagon Seat Co.—Lloyd's Handy Wagon Seat.

Newfoundland Slate.

The attention of the roofing trade is directed to the meritorious effort of the Canadian Commercial Agent in Newfoundland, Mr. E. D. Arnaud, to find a market in Canada for slate from the hitherto undeveloped quarries in Newfoundland. Canadian supplies of slate at the present time come from Quebec or the United States, particularly Pennsylvania. It is claimed that the slate deposits in Quebec are not very extensive, and already the owners are prospecting elsewhere in Canada for extensive deposits of high grade material. Pennsylvania slate is excellent in quality and color, and was imported last year to the extent of $113,531 worth, on which an average duty of 25% was paid, amounting to $25,357.

Newfoundland slate is said to be of exceptionally high quality and good color, and the report of the Geological Survey for Newfoundland speaks very favorably of the possibilities of an extensive trade being done if a market can be found, as the deposits are practically unlimited.

It is claimed that the freight charges on slate from Newfoundland will be considerably less than on that from the United States, and it can, therefore, be laid down in Canada at a lower price.

An energetic effort is being made to secure a car works for St. Thomas. The St. Thomas Car Company is being organized, and if the local capitalists respond liberally enough a plant will be established in the railroad city. There is no question about the demands for such equipment. The roads are crying out for more cars.

The National Drug and Chemical Co., who recently opened a branch in Toronto, under the managership of Mr. Frank Simson, formerly of Halifax, now have their plant on Beverley Street in first-class running order. Mr. Simson will for the future manufacture his well-known line of Sovereign Fruit Syrups, flavoring extracts, spices, etc., as a department of the big amalgamation with which he is connected. It is worth noting that Mr. Simson was the one who introduced and popularized lime juice as a beverage in Canada, his celebrated Sovereign brand being known from one end of the country to the other.

OUR NEW ZEALAND LETTER.

WELLINGTON, 12th May, 1907.

The great fair is a thing of the past. The closing ceremony took place on the 15th of last month. It was an imposing affair, and fitly terminated an undertaking of which New Zealand can be proud. In the speeches of the Hon. Hall Jones, acting Premier, and his Excellency the Governor, the advantages of the exhibition were duly ventilated.

The direct deficit is more than was expected (about £50,000), but the increase in revenue—customs and railways in particular—cover this more than tenfold. Apart from this the amount of money brought into the country from practically all parts of the world must have been enormous. It is computed that Christchurch city must have earned an extra million sterling during the five months of the Exhibition, which is a very big amount for such a small community. Naturally things are flat now in comparison, but the Exhibition has given an impetus to trade and industry, the effects of which will bear good fruit in the future.

It is to be deplored that the last days of the great show were marred by a very unpleasant incident. Mr. McIntyre, who, as Director of Exhibits, earned the highest praise from all and sundry for the able and impartial way in which he discharged his duties, was appointed later on also Director of Awards.

In this position it is asserted that he took bribes, and gave the awards to the highest bidder. The powers given to Mr. McIntyre were so autocratic that he practically could do what he liked. It is doubtful if these powers were given to him by the minister in charge, or whether he assumed them on his own authority. When things got too hot for him he fled, and though there was at first some hesitation to bring him back, at last a warrant has been issued and he was arrested in Montevideo, to be brought back via London in about three months' time.

Under the circumstances not much value can be attached to the awards, and it was very fortunate that Mr. Burns, your commissioner, anticipating trouble, declined to compete for individual prizes. Mr. Burns secured :

(1) An extra special award and gold medal for the general scheme of installation of the exhibit as a whole.

(2) A special award and gold medal for the exhibit of minerals.

(3) A special award and gold medal for the exhibit of agricultural products, fruit, maple syrup and honey.

(4) A special award and gold medal for exhibit of manufactured articles.

This last award covers everything on the space.

If a plebiscite had been taken the above awards would have been granted unanimously, and, therefore, they cannot be considered to be under a cloud as all the individual awards practically are.

Mr. Burns showed great discretion and tact, and manufacturers' can thank him that he secured honors for them which cannot be disputed.

The Canadian Court was well arranged and well managed. This is acknowledged by every visitor, and it is most remarkable that no one who visited the Exhibition commences to vent his impressions without mentioning the Canadian Court first. As a *tout ensemble*, it has made such an impression that when every other part has faded from memory the Canadian Court will still stand out vividly before the mind's eye.

It was the finest advertisement Canada possibly could have, and, no doubt, good results will follow, provided the Canadian manufacturer is not *too* busy at home and will give the export trade some attention.

Mr. A. W. Burns and his able helpers can be proud of their work. No doubt exhibitors will recognize their services in some suitable form.

In my next letter I hope to be able to send you some particulars about trade conditions here, and the prospects for manufacturers who intend to work this country.

COSMOPOLITAN.

Manufacturers' Representative.

Well-know commission agent in Belgium and France, good connections in both countries, would like to hear from Canadian firms desiring representation there. First-class references in Canada, and is already representing several Canadian houses, chiefly exporters of raw material. Particulars at this office.

SMOKE NUISANCE DISCUSSED.

The second annual convention of the International Association for the Prevention of Smoke, was held in the council chamber of the City Hall in Milwaukee on June 26th, 27th and 28th. The active membership of the society is composed exclusively of city officials who are more or less connected with the duty of suppressing smoke, such as smoke inspectors, city engineers, commissioners of public service, etc. Associate members are individual consulting engineers and others interested in the subject of the suppression of smoke.

The meeting was attended by smoke inspectors and public officials from Toronto, Milwaukee, Chicago, Cleveland, Pittsburg, Rochester, Syracuse and other places. A large part of the meeting was devoted to routine business connected with the passing of new constitution and by-laws and reports of committees. Considerable discussion was held concerning the smoke laws in different states. It appears that in some states smoke has been declared by law to be a nuisance, *per se*, and the emission of dense smoke a misdemeanor and punishable as such in the courts. In these states, therefore, the suppression of smoke by legal action is comparatively easy, but in other states the smoke inspectors have to secure witnesses who can prove actual damage before an injunction be issued or a fine be imposed.

Many discussions were held on the various methods of getting rid of the smoke nuisance, and there was no difference of opinion whatever as to the fact that smoke is completely suppressed by the use of many different kinds of apparatus when they are properly attended to. The chief difficulty is to get fireman who will take care of the apparatus. It was suggested that a way to improve the fireman would be to raise his wages $50 a year, payable at the end of the year, provided he had not been arrested for making smoke. The result would be that he would pay such close attention to his fires as to save more than the $50 a year for his employer. He would get the $50 and the city would be benefited by the absence of smoke.

A public lecture was given by Mr. William J. Zimmerman, a lawyer of Milwaukee, on "The Public Right to Pure Air." He showed that a man has no more right to pollute the atmosphere with smoke than he has to pollute a stream of drinking water or to throw his garbage into his neighbor's garden. The emission of smoke is not only a misdemeanor, but it is the grossest kind of bad manners, which no gentleman should be guilty of.

The next meeting of the society will be in Cleveland. Charles P. Poethke, smoke inspector of Milwaukee, was elected president for the coming year, and John Krause, smoke inspector of Cleveland, vice-president ; R. C. Harris, property commissioner of Toronto, Canada, is the secretary and treasurer.

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